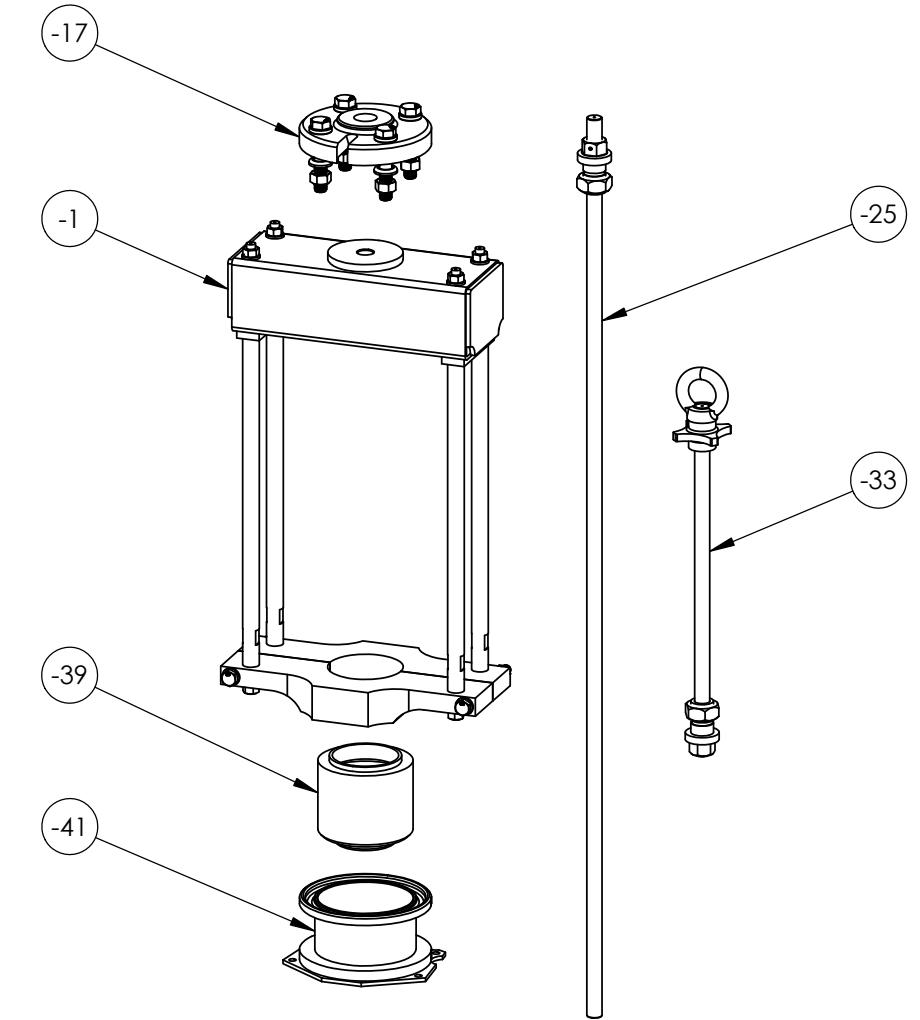


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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		RELEASED FOR PRODUCTION	6/22/2016	DPD	JAG
B	-86	BOM: REPLACE -23 WITH -62 WASHER ; ADDED -9 DIMENSION; REMOVED REV. BLOCK FROM SHEET 2 THRU SHEET 22	1/22/2021	SAD	SAD

ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
		X		-1	1	PULLER ASSEMBLY				2
		X	1	-3		PULLER WELDMENT				3
		1		-5		PULLER TUBE	A36/1018/1020 HR			4
		1		-7		PULLER BOSS	1018/1020 CR			5
		2		-9		PULLER PLATE	A36/1018/1020 HR			6
		2		-11		END CAP	A36/1018/1020 HR			7
		2		-13		PULLER HALF	1018/1020 CR			8
		4		-15		PULLER BOLT	4140/4142			9
		X		-17	1	PULLER CAP ASSEMBLY				10
		1		-19		PULLER CAP	4140/4142 Q & T			11
		4		-21		BUSHING	4140/4142 Q & T			12
		X		-25	1	LONG ROD ASSEMBLY				14
		1		-27		LONG ROD	O-1			15
1	1			-29		NUT	4140/4142 Q & T			16
1	1			-31		HEX NUT	4140/4142 Q & T			17
X			-33	1	SHORT ROD ASSEMBLY					18
1				-35		SHORT ROD	O-1			19
1				-37		LOBED NUT	4140/4142 Q & T			20
				-39	1	PULLER PISTON	4140/4142			21
				-41	1	PULLER CYLINDER	4140/4142			22
		4		B/O	-43	HEX HEAD CAP SCREW	STEEL	M16 X 2mm X 90mm, CLASS 10.9 (MCMASTER-CARR #95327A785)		10
1				B/O	-45	ROUND EYE NUT	STEEL	M20 X 2.5mm, Ø40mm I.D. X Ø72mm O.D. X 71mm (MCMASTER-CARR #3112T56)		18
			12	B/O	-47	WASHER	STEEL	M12 (MCMASTER-CARR #91166A290)		2
			10	B/O	-49	HEX NUT	STEEL	M12 X 1.75mm (MCMASTER-CARR #90591A181)		2
			2	B/O	-51	HEX HEAD CAP SCREW	STEEL	M12 X 1.75mm X 160mm (MCMASTER-CARR #91280A752)		2
			4	B/O	-53	HEX NUT	STEEL	M16 X 2mm, CLASS 10 (MCMASTER-CARR #92497A600)		10
1				B/O	-55	SPRING PIN	S.S.	M4 X 30mm (MCMASTER-CARR #91610A512)		13
					-61	1	PAPER	SAFETY INFORMATION NOTICE		
					-62		WASHER	17-4 PH		23
ASSY -33	ASSY -25	ASSY -17	ASSY -3	ASSY -1						
						4				

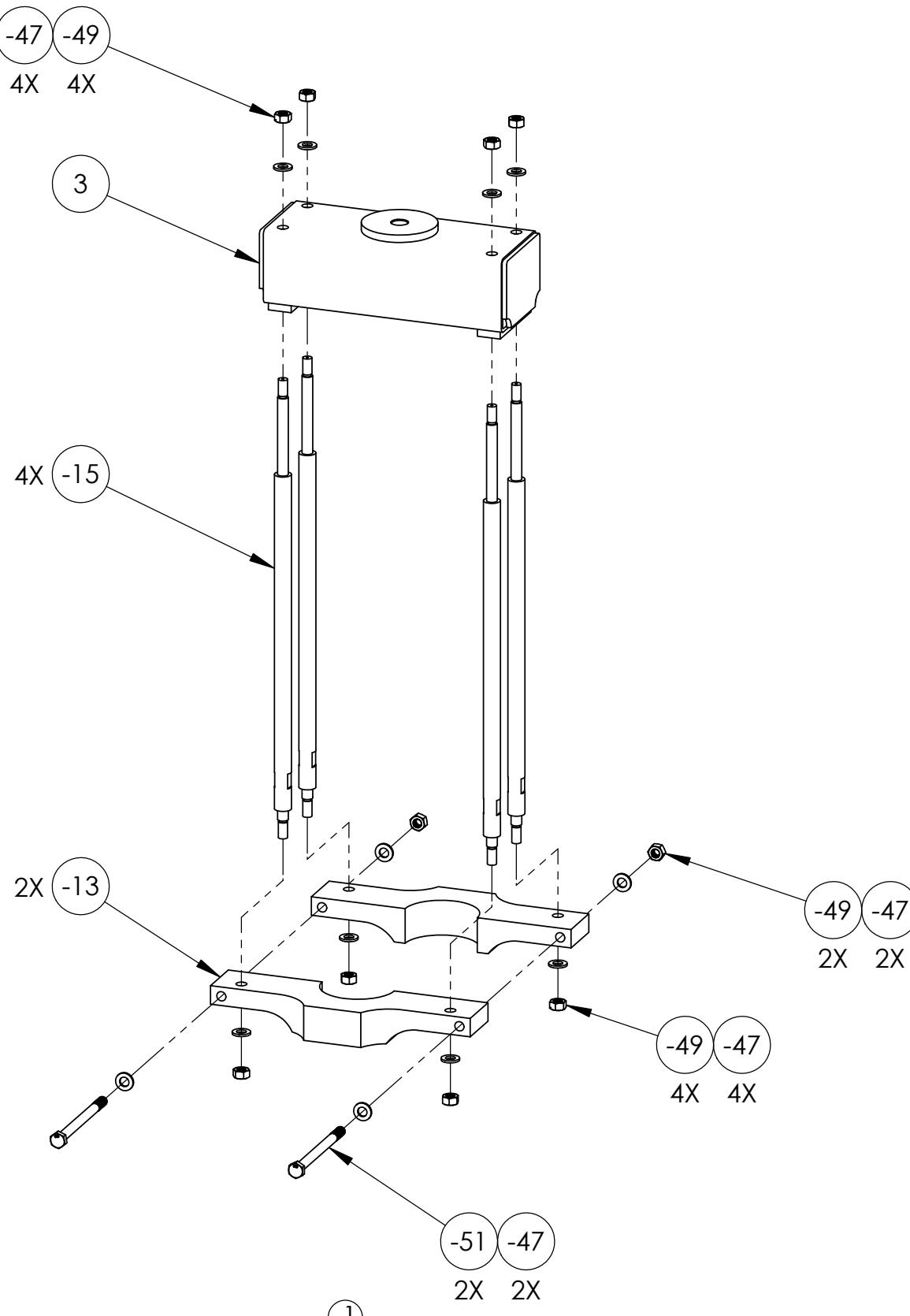


NOTES:  
 1. REF. EUROCOPTER T/N: 117-12010W62.  
 2. PART OF KIT RBE117-12010W62.

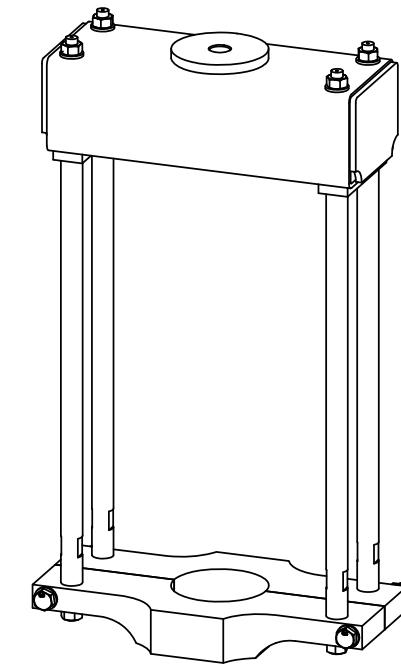
TITLE		REV
MAST REPLACEMENT KIT		B
DWG NO.	RBE117-12010W62D	
MAT'L		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT	TREAT	XXX ± .005 FRACTIONS ± 1/8
FINISH		XX ± .01 ANGLES ± 5°
SPEC		X ± .1 SURFACES = 125
DRAWN BY:	DUERFELDT	1. BREAK ALL SHARP EDGES
CHECKED:	RF	.015 x 45° OR .015R
OPPS APPR:	FK	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
QA APPR:	N/A	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
APPROVED:	SAD SAD	USED ON MODEL
SCALE	1:10	DATE 2/22/2016
		SHEET 1 OF 23

B

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PULLER ASSEMBLY

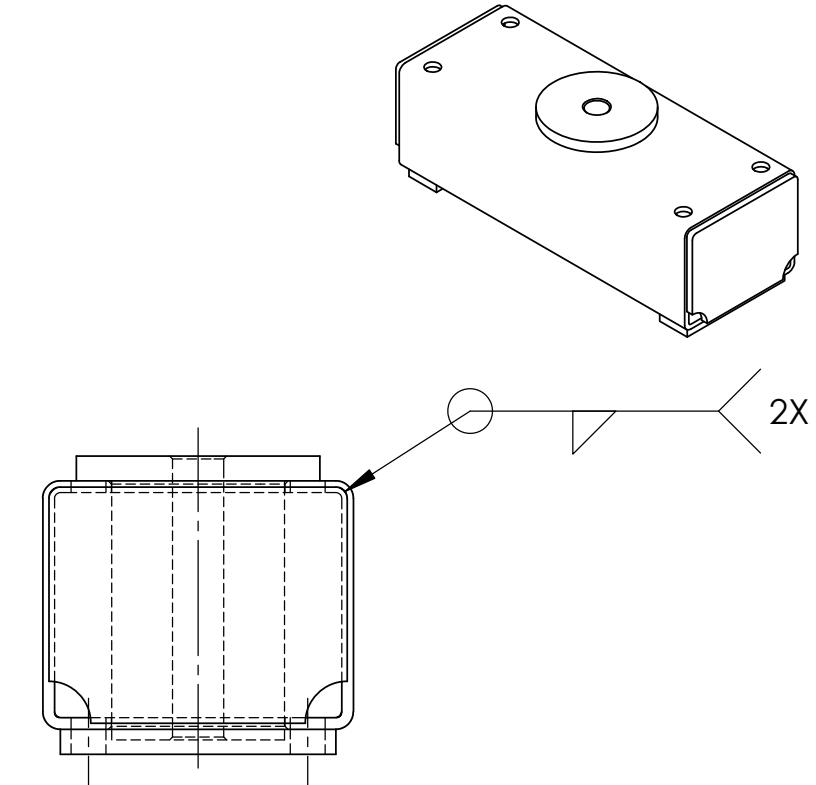
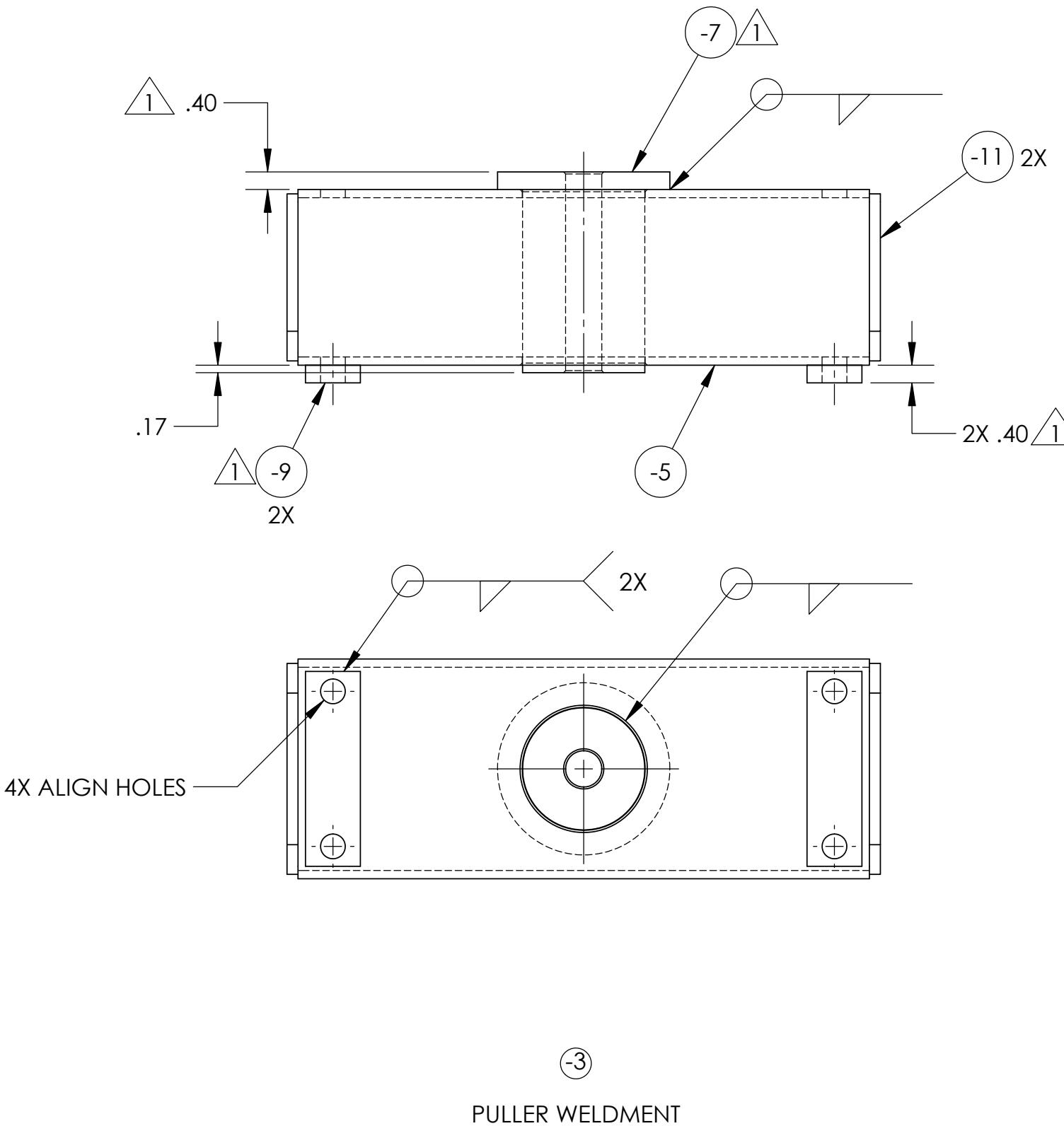


ITEM	Description
1	PULLER WELDMENT
2	PULLER HALF
3	PULLER BOLT
4	WASHER
5	HEX NUT
6	HEX HEAD CAP SCREW

**DART**  
AEROSPACE

TITLE	
MAST REPLACEMENT KIT	
DWG NO. RBE117-12010W62D-1 REV B	
MAT'L HEAT TREAT FINISH SPEC DRAWN BY: DUERFELDT CHECKED: RF OPPS APPR: FK QA APPR: N/A APPROVED: SAD	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5° X ± .1 SURFACES = 125 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 USED ON MODEL EC145	
SCALE	1:10
DATE	2/22/2016
SHEET 2 OF 23	

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NOTE:

1 MACHINE AFTER WELDING.



TITLE  
**MAST REPLACEMENT KIT**

DWG NO. RBE117-12010W62D-3

REV  
**B**

<u>MAT'L</u>	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
<u>HEAT</u>	.XXX ± .005 FRACTIONS ± 1/8
<u>TREAT</u>	XX ± .01 ANGLES ± .5°
<u>FINISH</u>	X ± .1 SURFACES = 125
<u>SPEC</u>	QMSI-6.2.2, B.O. REV D
<u>DRAWN BY:</u>	DUERFELDT
<u>CHECKED:</u>	RF
<u>OPPS APPR:</u>	FK
<u>QA APPR:</u>	N/A
<u>APPROVED:</u>	SAD
<u>SCALE</u>	EC145
<u>DATE</u>	2/22/2016
<u>SHEET</u>	3 OF 23

USED ON MODEL

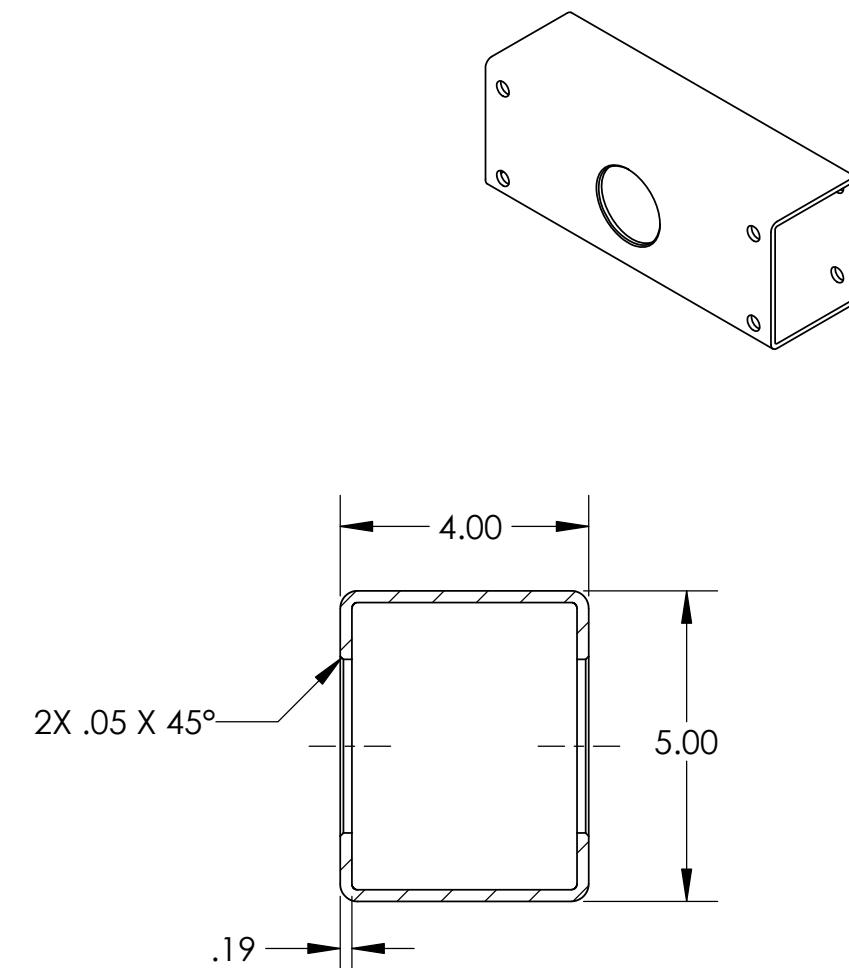
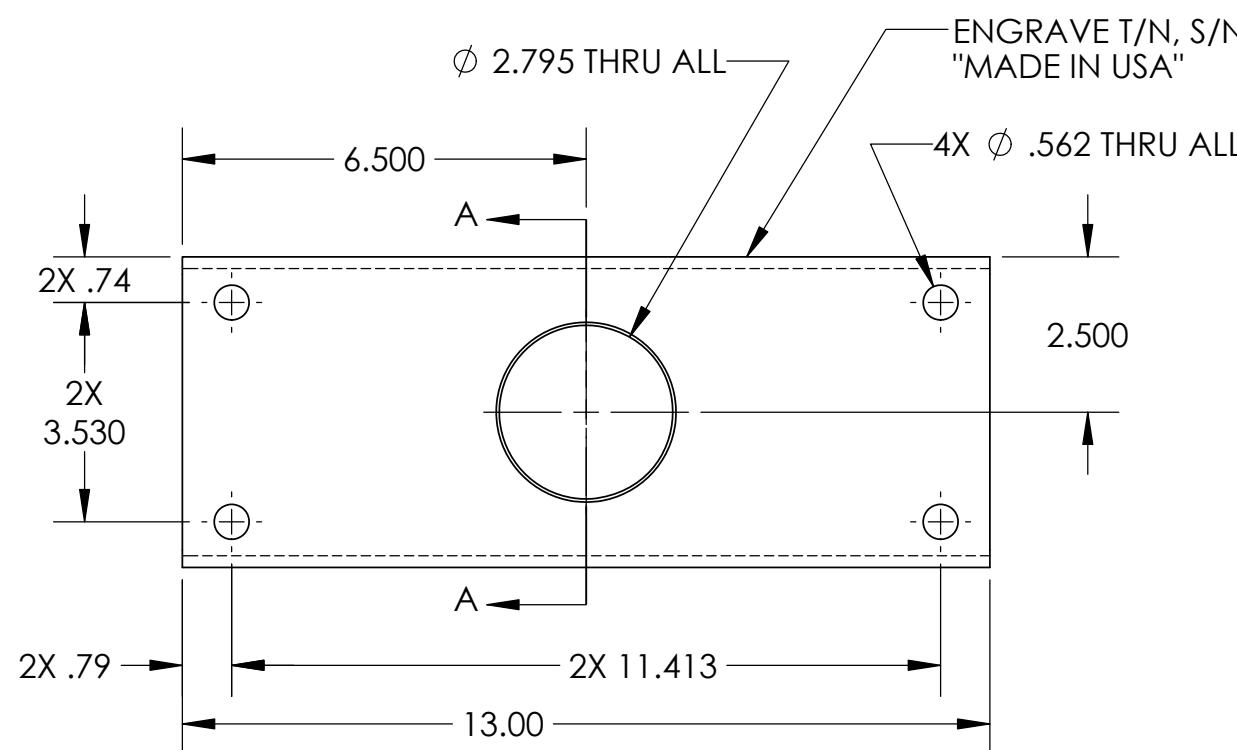
ASME Y14.5M-2009

1. BREAK ALL SHARP EDGES  
.015 x 45° OR .015R

2. DIMENSIONAL LIMITS APPLY  
AFTER PLATING

3. INTERPRET DIM AND TOL PER

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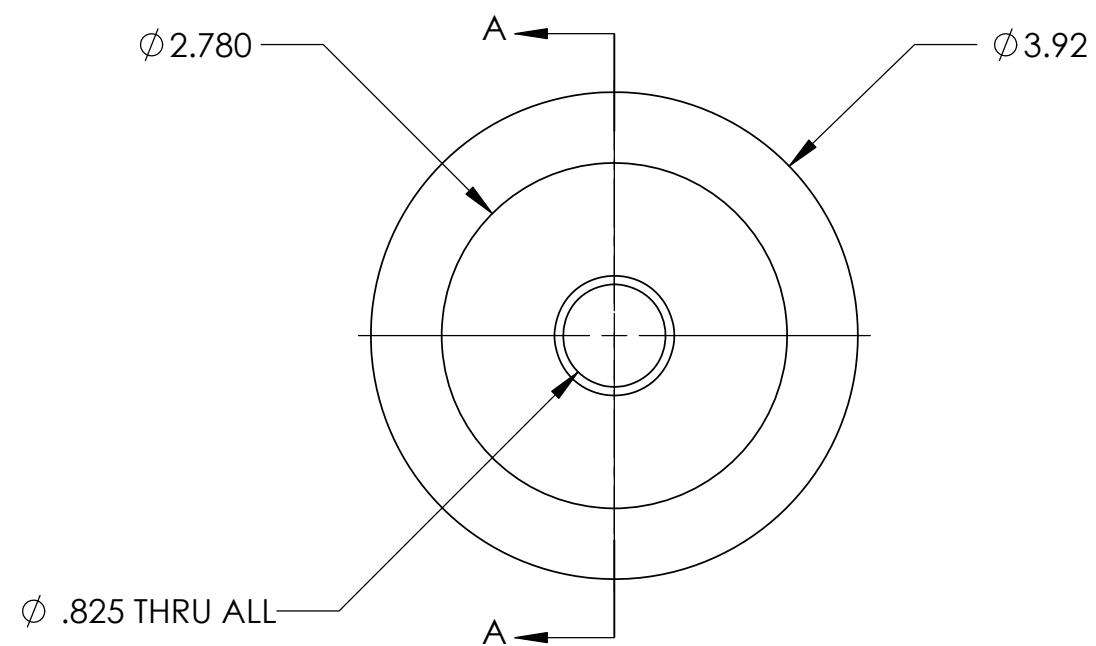
SECTION A-A

(-5)

PULLER TUBE

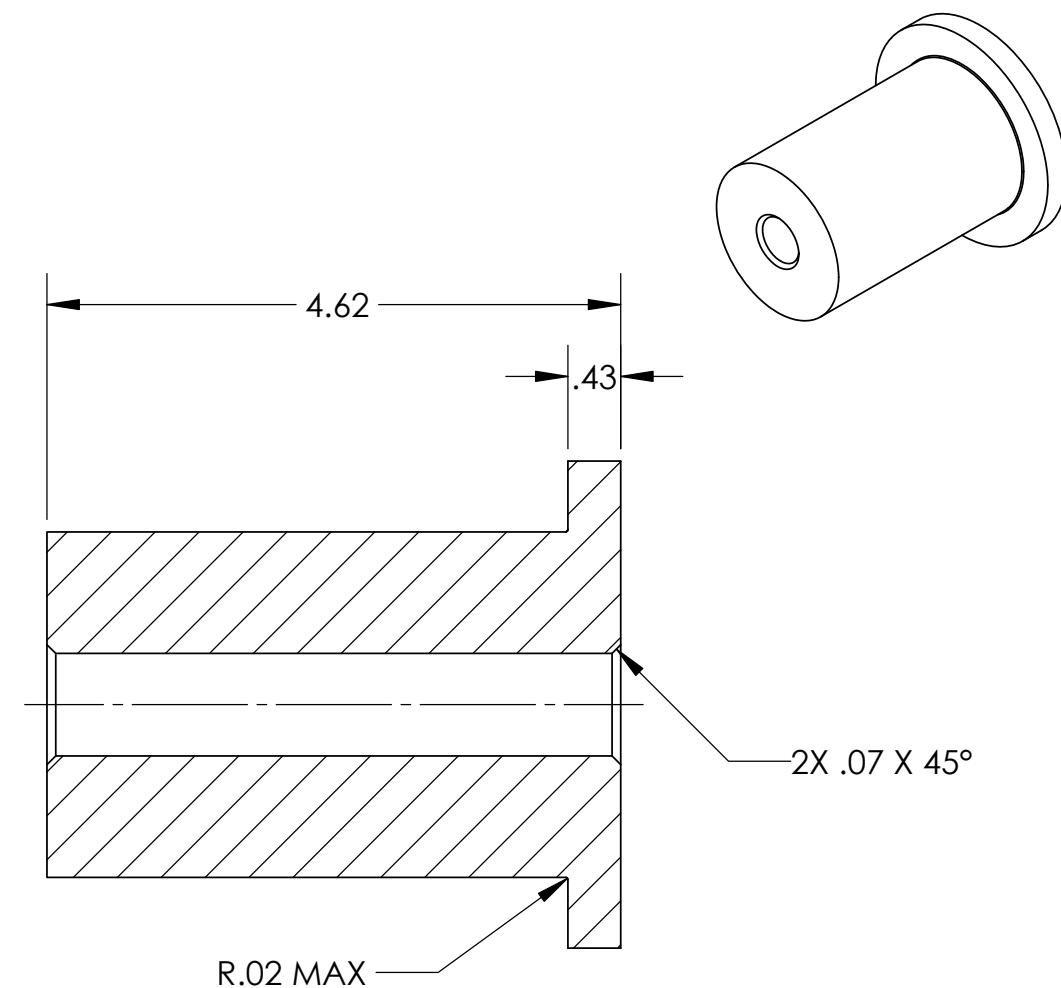
DART AEROSPACE	
TITLE	
MAST REPLACEMENT KIT	
DWG NO.	RBE117-12010W62D-5
REV	B
MAT'L A36/1018/1020 HR	
HEAT	
TREAT	
FINISH SEE -3	
SPEC	
DRAWN BY:	DUERFELDT
CHECKED:	RF
OPPS APPR:	FK
QA APPR:	N/A
APPROVED:	SAD
SCALE	1:4
DATE	2/22/2016
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .005 FRACTIONS ± 1/8	
XX ± .01 ANGLES ± .5°	
X ± .1 SURFACES = 125	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL	
EC145	
SHEET 4 OF 23	

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PULLER BOSS

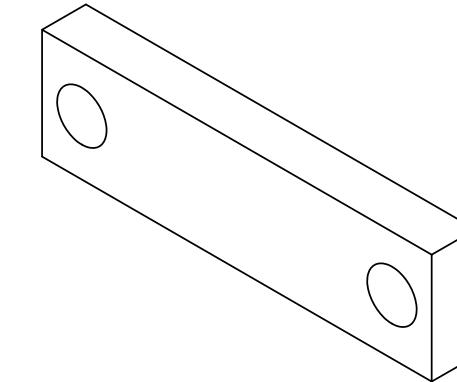
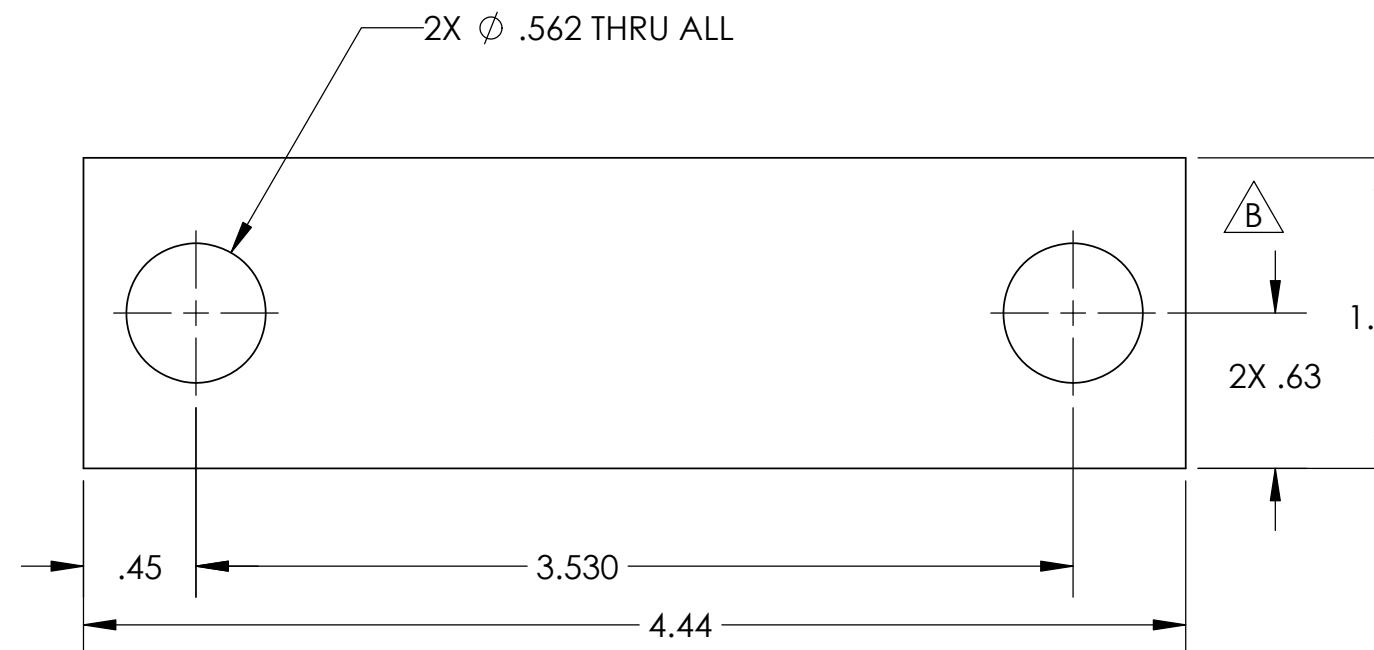
(-7)



SECTION A-A

<b>DART</b> AEROSPACE	
TITLE	
MAST REPLACEMENT KIT	
DWG NO.	RBE117-12010W62D-7
REV	B
MAT'L 1018/1020 CR	
HEAT	
TREAT	
FINISH SEE -3	
SPEC	
DRAWN BY:	DUERFELDT
CHECKED:	RF
OPPS APPR:	FK
QA APPR:	N/A
APPROVED:	SAD
SCALE	1:2
DATE	2/22/2016
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
XXX $\pm$ .005 FRACTIONS $\pm$ 1/8	
XX $\pm$ .01 ANGLES $\pm$ .5°	
X $\pm$ .1 SURFACES = 125	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL	
EC145	
SHEET 5 OF 23	

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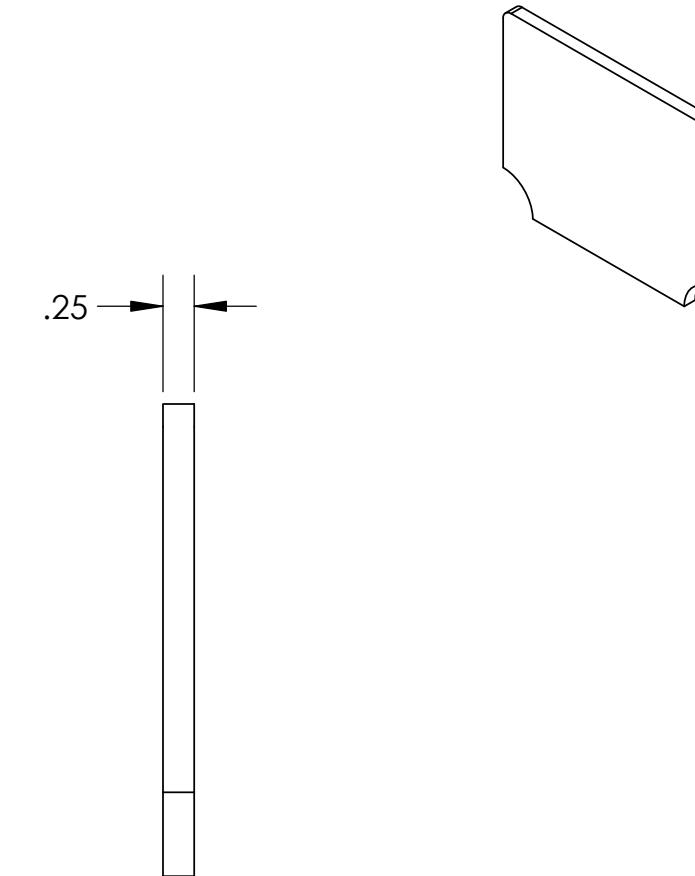
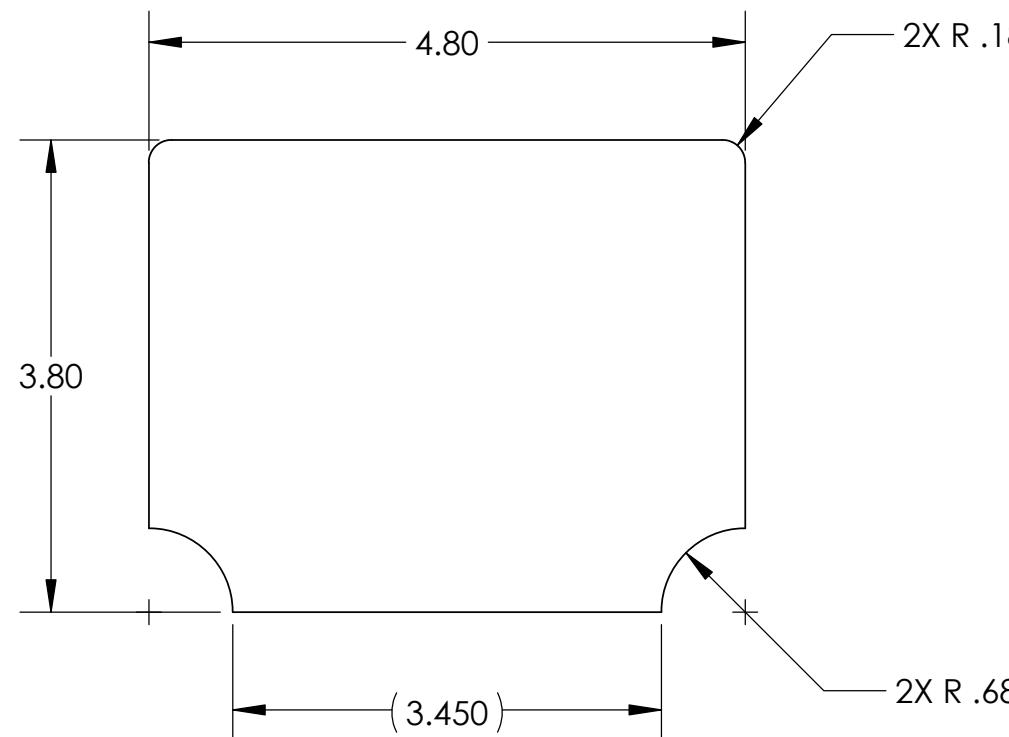


PULLER PLATE

(-9)

<b>DART</b> AEROSPACE	
TITLE	
MAST REPLACEMENT KIT	
DWG NO. RBE117-12010W62D-9 REV B	
MAT'L A36/1018/1020 HR UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT FRACTIONS $\pm 1/8$ FINISH SEE -3 ANGLES $\pm .5^\circ$	
SPEC SURFACES = 125 DRAWN BY: DUERFELDT CHECKED: RF OPPS APPR: FK QA APPR: N/A APPROVED: SAD SCALE 1:1 DATE 2/22/2016 SHEET 6 OF 23	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 USED ON MODEL EC145	

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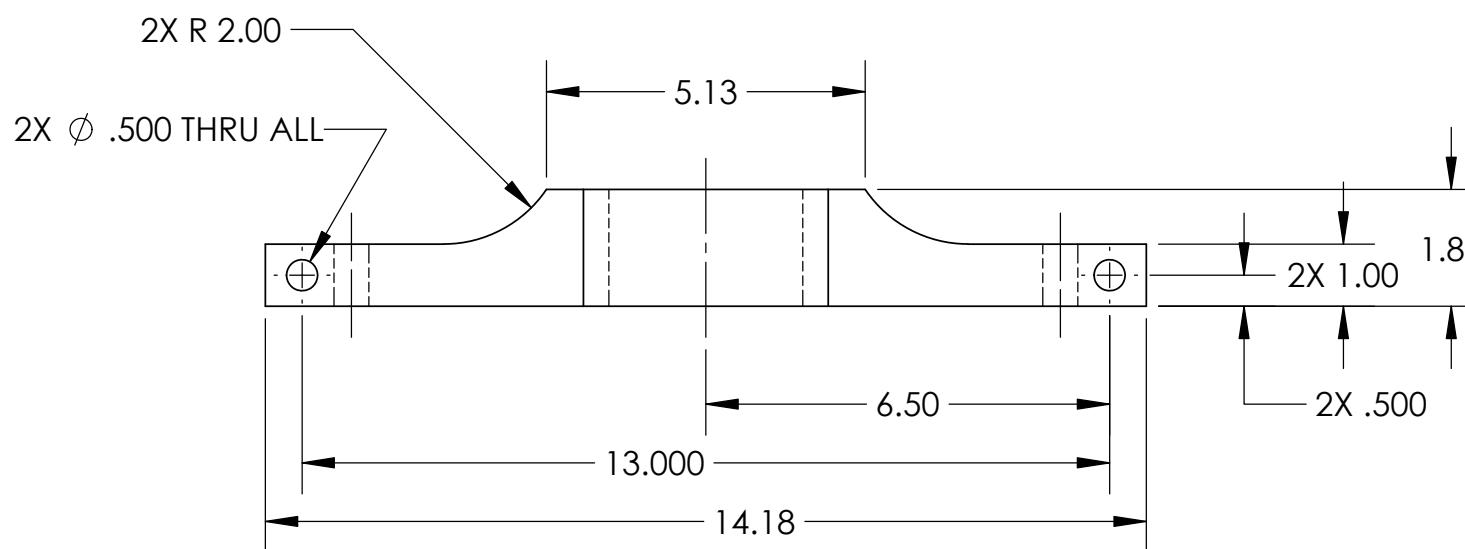
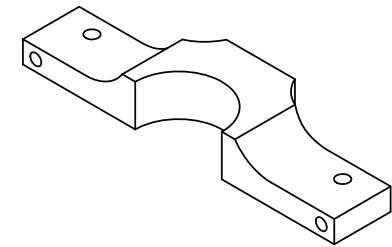
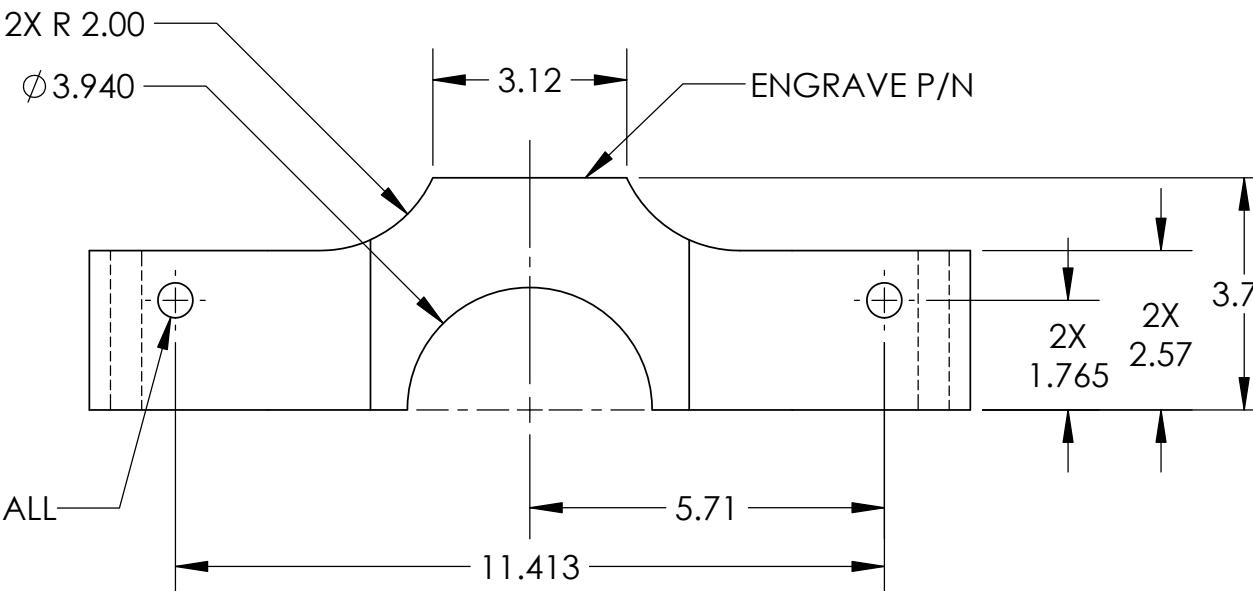


END CAP

-11

<b>DART</b> AEROSPACE	
TITLE	
MAST REPLACEMENT KIT	
DWG NO. RBE117-12010W62D-11 REV B	
MAT'L A36/1018/1020 HR	
HEAT TREAT	
FINISH SEE -3	
SPEC	
DRAWN BY:	DUERFELDT
CHECKED:	RF
OPPS APPR:	FK
QA APPR:	N/A
APPROVED:	SAD
SCALE	1:2
DATE	2/22/2016
USED ON MODEL	
EC145	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .010 FRACTIONS ± 1/8	
XX ± .03 ANGLES ±1°	
X ± .1 SURFACES = 125	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
SHEET 7 OF 23	

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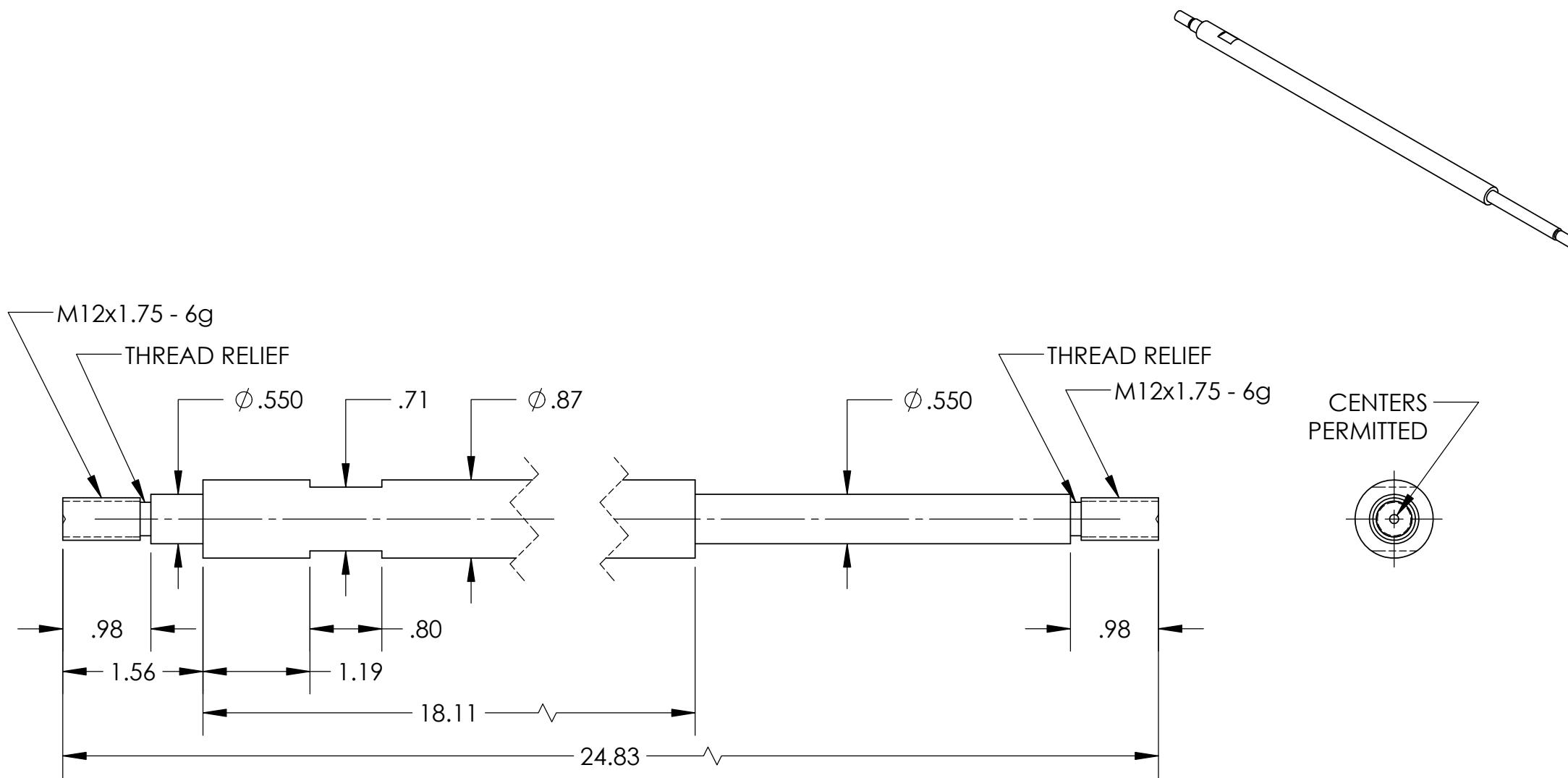


PULLER HALF

(-13)

<b>DART</b> AEROSPACE	
TITLE	
MAST REPLACEMENT KIT	
DWG NO. RBE117-12010W62D-13 REV B	
MAT'L 1018/1020 CR	
HEAT TREAT	
FINISH BLACK OXIDE	
SPEC QMSI-6.2.2, B.O. REV D	
DRAWN BY:	DUERFELDT
CHECKED:	RF
OPPS APPR:	FK
QA APPR:	N/A
APPROVED:	SAD
SCALE	1:4
DATE	2/22/2016
USED ON MODEL	
EC145	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .005 FRACTIONS ± 1/8	
.XX ± .01 ANGLES ± .5°	
X ± .1 SURFACES = 125	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	

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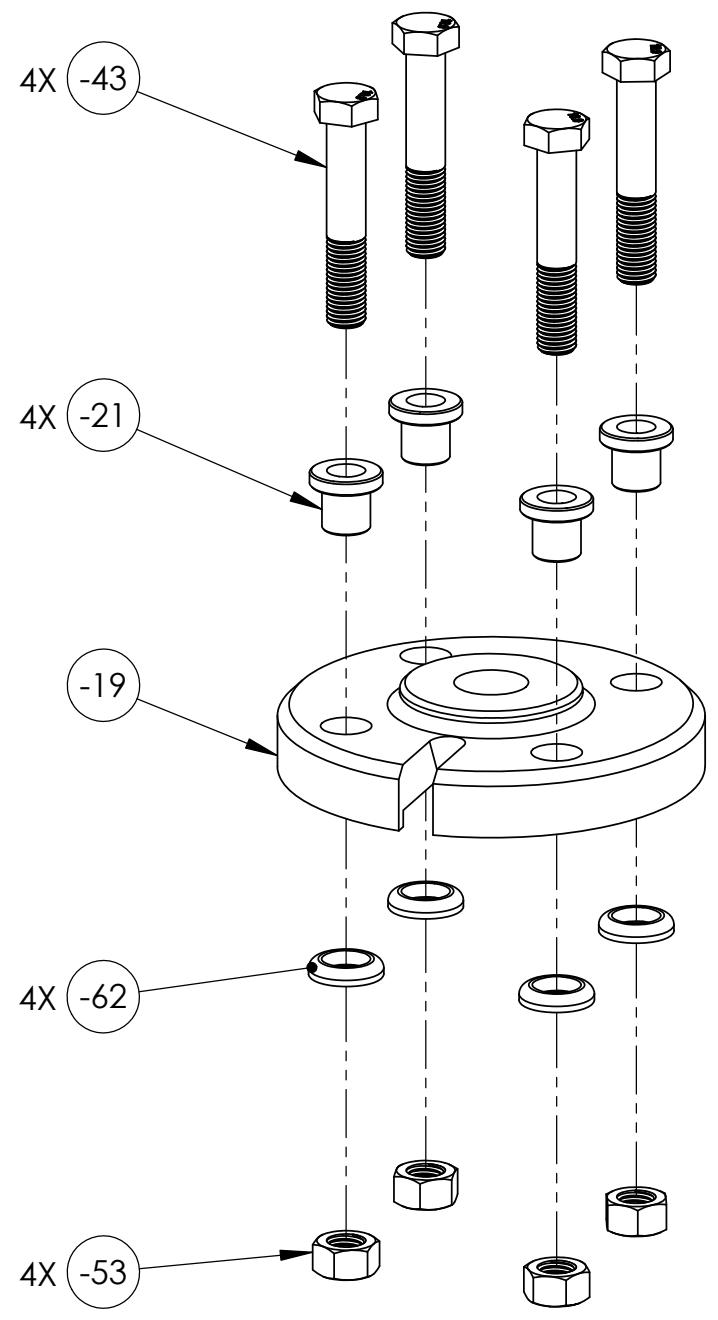


-15

PULLER BOLT

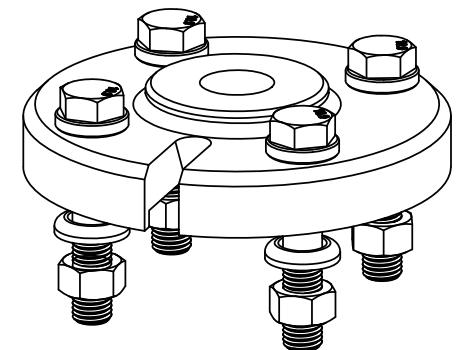
<b>DART</b> <b>AEROSPACE</b>	
TITLE	
MAST REPLACEMENT KIT	
DWG NO. RBE117-12010W62D-15 REV B	
MAT'L 4140/4142	
HEAT TREAT	
FINISH BLACK OXIDE	
SPEC QMSI-6.2.2, B.O. REV D	
DRAWN BY:	DUERFELDT
CHECKED:	RF
OPPS APPR:	FK
QA APPR:	N/A
APPROVED:	SAD
SCALE	1:2
DATE	2/22/2016
USED ON MODEL	
EC145	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .005 FRACTIONS $\pm 1/8$ .015 OR .015R ANGLES $\pm .5^\circ$ X .1 SURFACES = 125	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
SHEET 9 OF 23	

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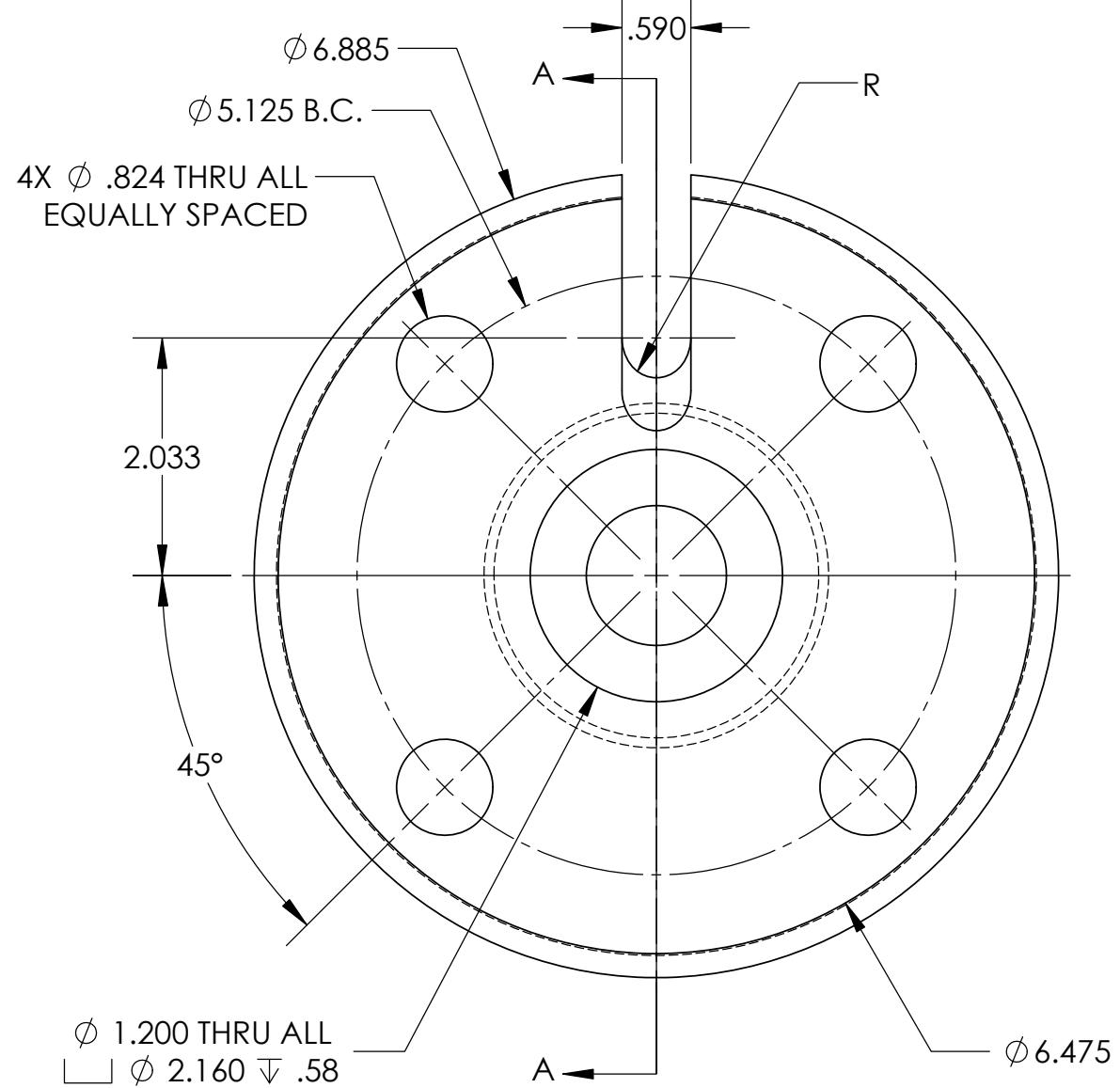
-17

PULLER CAP ASSEMBLY



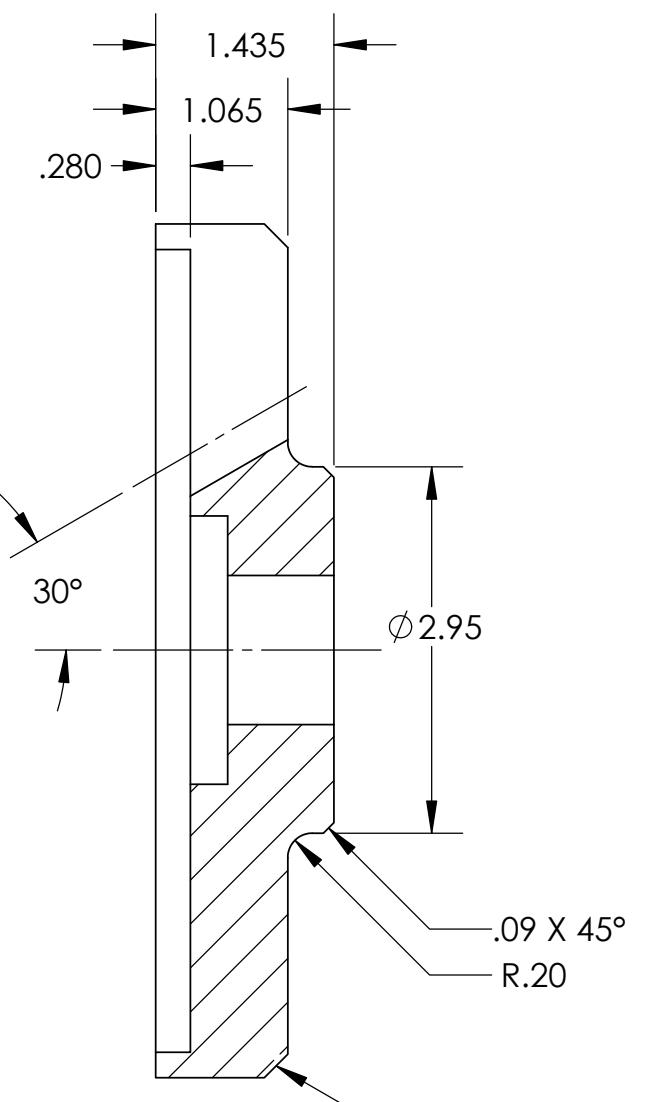
<b>DART</b> AEROSPACE	
TITLE	
MAST REPLACEMENT KIT	
DWG NO. RBE117-12010W62D-17 REV B	
MAT'L UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT .XXX ± .005 FRACTIONS ± 1/8 FINISH XX ± .01 ANGLES ± .5° SPEC X ± .1 SURFACES = 125	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY:	DUERFELDT
CHECKED:	RF
OPPS APPR:	FK
QA APPR:	N/A
APPROVED:	SAD
USED ON MODEL EC145	
SCALE	1:4
DATE	2/22/2016
SHEET 10 OF 23	

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PULLER CAP

(-19)



SECTION A-A

**DART**  
AEROSPACE

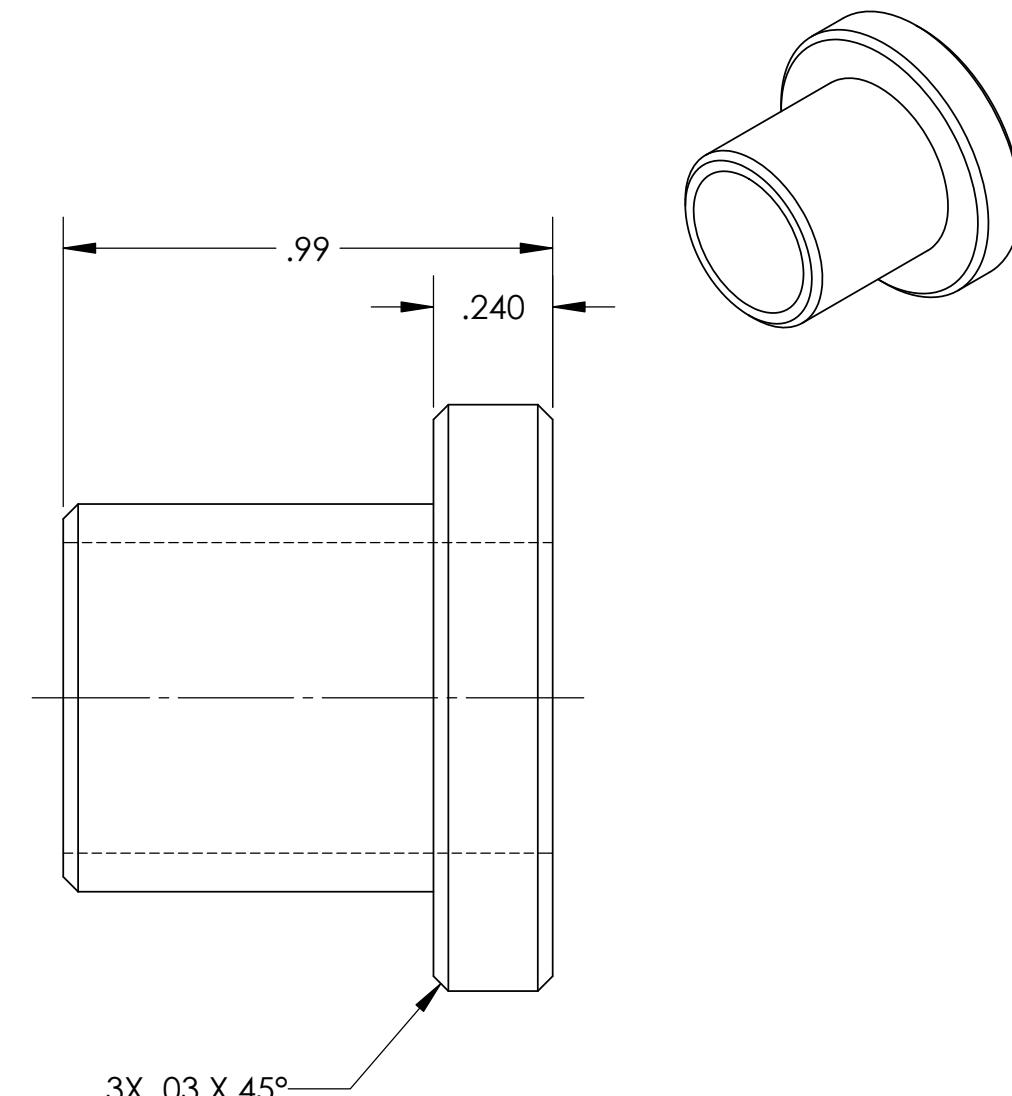
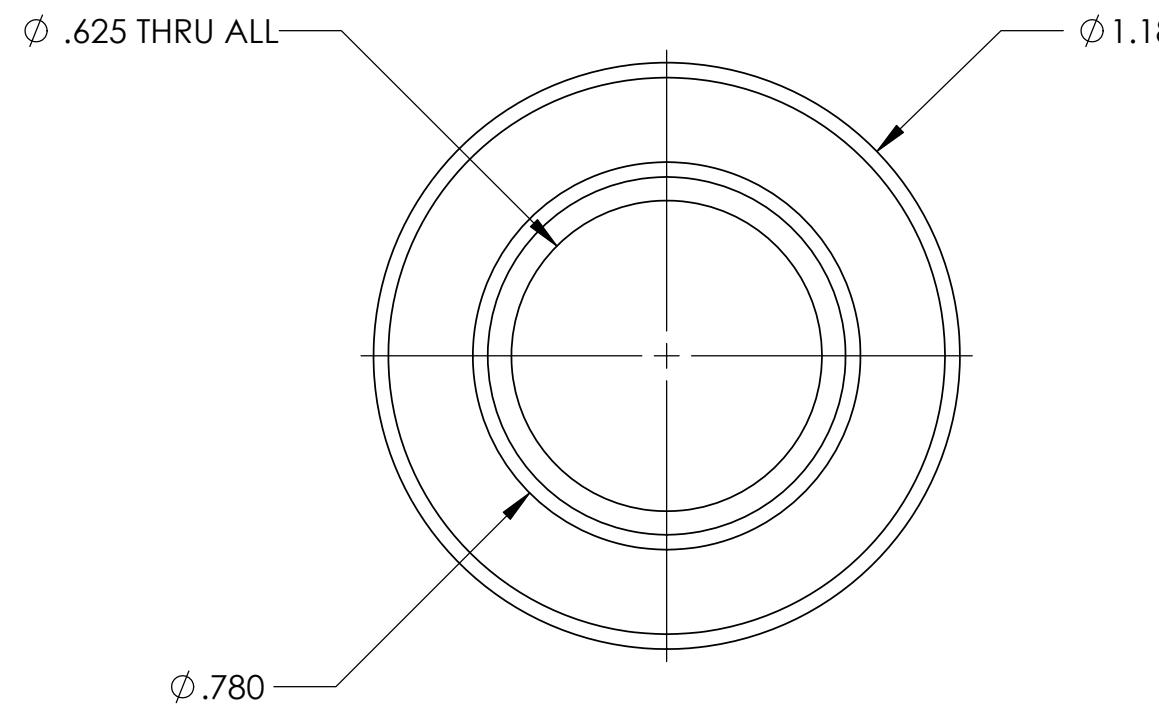
TITLE  
**MAST REPLACEMENT KIT**

DWG NO. **RBE117-12010W62D-19**

REV  
**B**

MAT'L 4140/4142 Q & T	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT	.XXX ± .005 FRACTIONS ± 1/8
TREAT	XX ± .01 ANGLES ± .5°
FINISH	X ± .1 SURFACES = 125
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
QMSI-6.2.2, B.O. REV D	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
DRAWN BY:	3. INTERPRET DIM AND TOL PER DUERFELDT ASME Y14.5M-2009
CHECKED:	RF
OPPS APPR:	FK
QA APPR:	N/A
APPROVED:	SAD
SCALE	EC145
DATE	2/22/2016
SHEET	11 OF 23

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(-21)

BUSHING

**DART**  
AEROSPACE

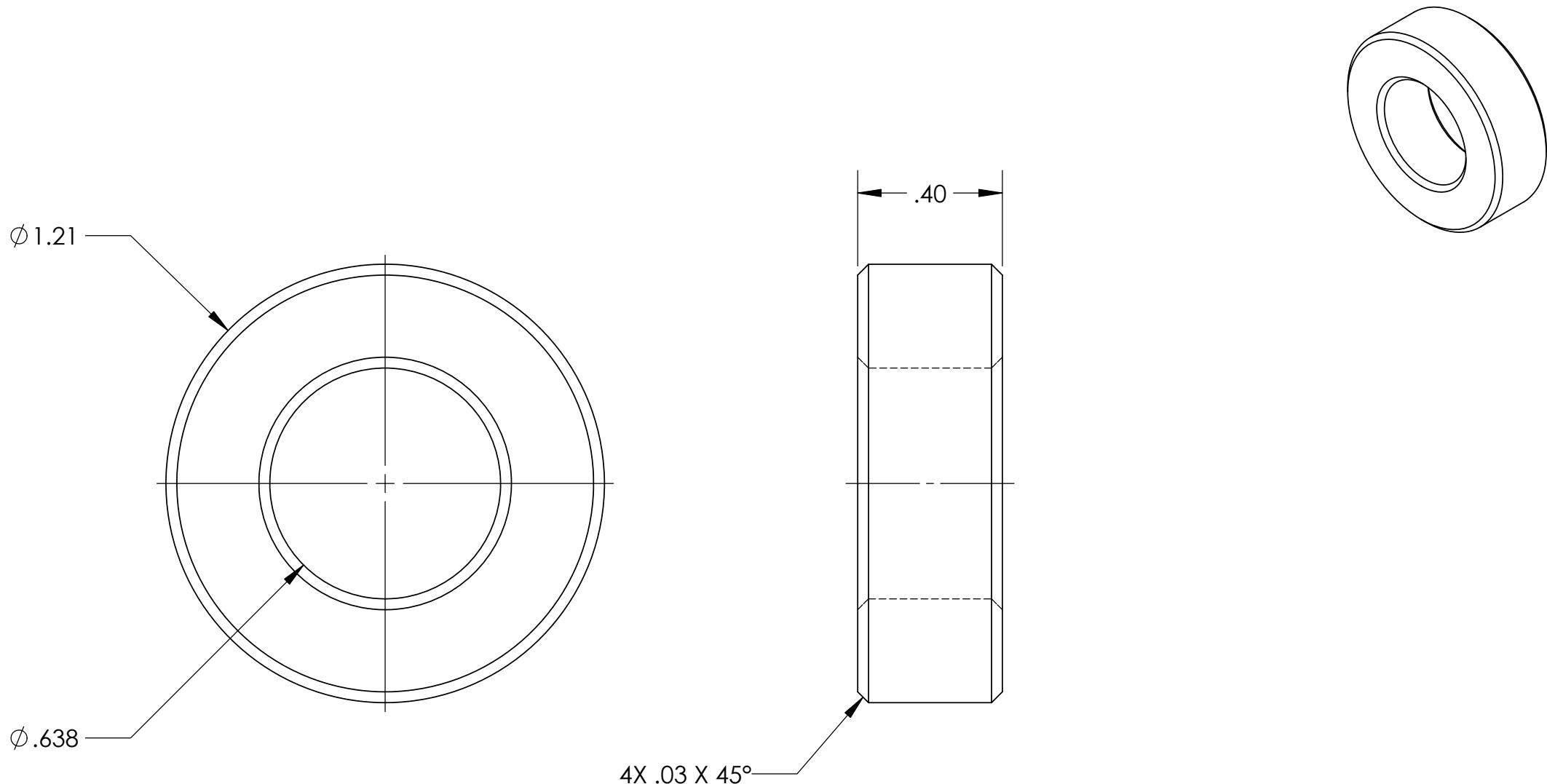
TITLE  
MAST REPLACEMENT KIT

DWG NO. RBE117-12010W62D-21

REV B

MAT'L 4140/4142 Q & T	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT	XXX ± .005 FRACTIONS ± 1/8
TREAT	XX ± .01 ANGLES ± .5°
FINISH	X ± .1 SURFACES = 125
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
QMSI-6.2.2, B.O. REV D	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
DRAWN BY:	3. INTERPRET DIM AND TOL PER DUERFELDT ASME Y14.5M-2009
CHECKED:	RF
OPPS APPR:	FK
QA APPR:	N/A
APPROVED:	SAD
SCALE	EC145
DATE	2/22/2016
SHEET	12 OF 23

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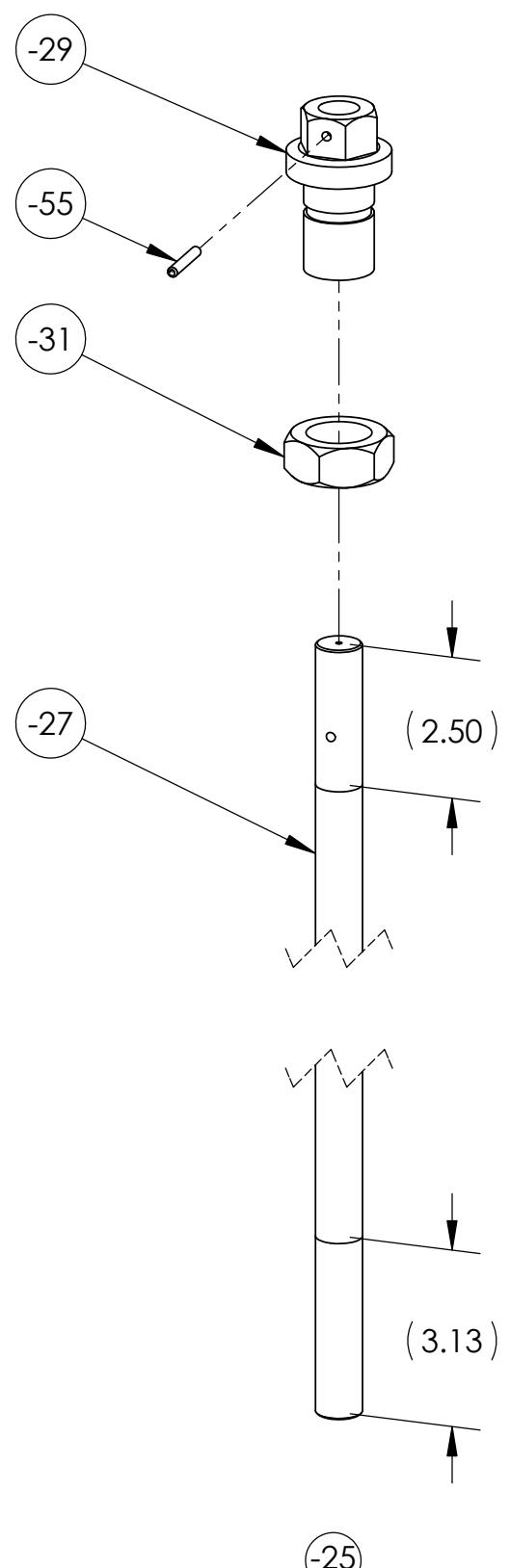


-23

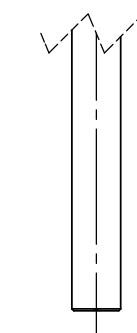
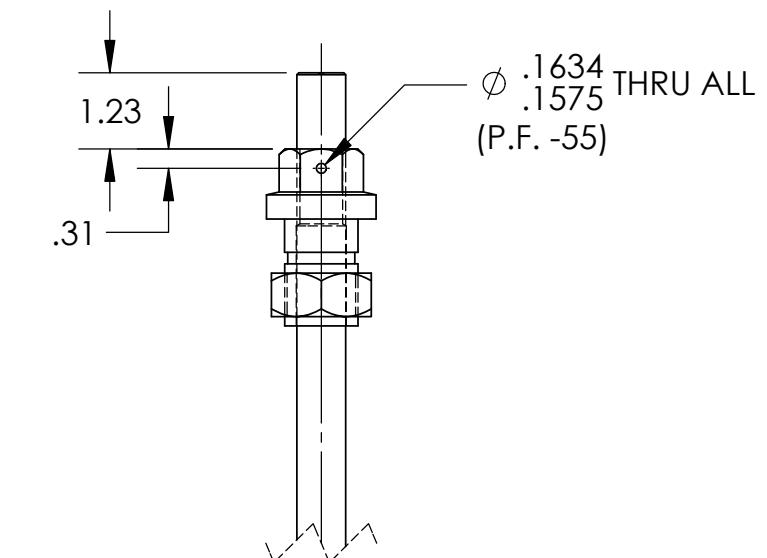
WASHER

<b>DART</b> AEROSPACE	
TITLE	
MAST REPLACEMENT KIT	
DWG NO. RBE117-12010W62D-23 REV B	
MAT'L 4140/4142 Q & T UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT FRACTIONS $\pm 1/8$ FINISH BLACK OXIDE XX $\pm .01$ ANGLES $\pm .5^\circ$ SPEC QMSI-6.2.2, B.O. REV D X $\pm .1$ SURFACES = 125✓ DRAWN BY: DUERFELDT CHECKED: RF OPPS APPR: FK QA APPR: N/A APPROVED: SAD SCALE 2:1 DATE 2/22/2016 SHEET 13 OF 23	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL EC145	

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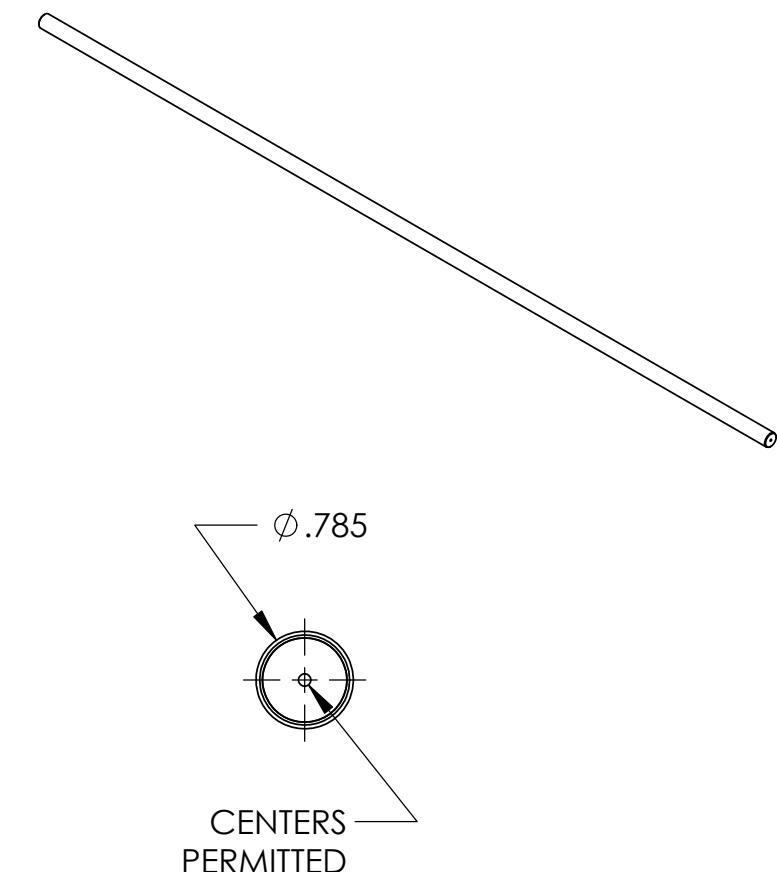
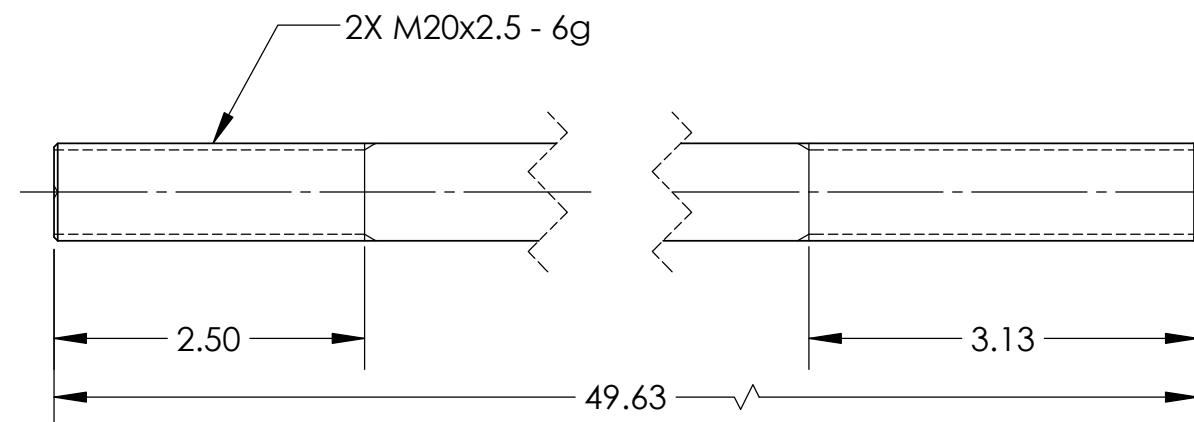


LONG ROD ASSEMBLY



DART AEROSPACE	
TITLE	
MAST REPLACEMENT KIT	
DWG NO.	RBE117-12010W62D-25
REV	B
MAT'L	
HEAT	
TREAT	
FINISH	
SPEC	
DRAWN BY:	DUERFELDT
CHECKED:	RF
OPPS APPR:	FK
QA APPR:	N/A
APPROVED:	SAD
SCALE	1:4
DATE	2/22/2016
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .005 FRACTIONS ± 1/8	
.XX ± .01 ANGLES ± .5°	
X ± .1 SURFACES = 125 ✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL	
EC145	
SHEET 14 OF 23	

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LONG ROD

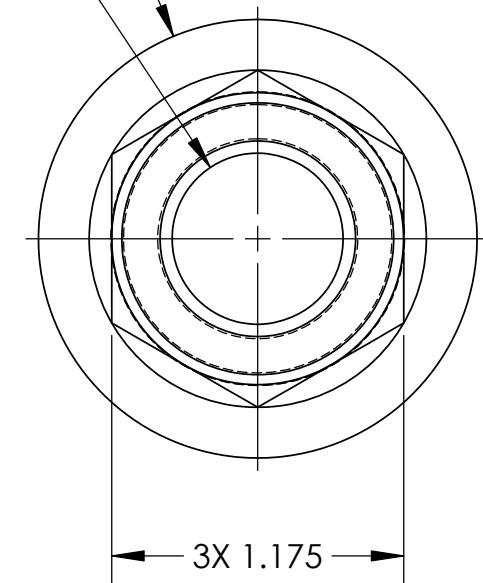
-27

DART AEROSPACE	
TITLE	
MAST REPLACEMENT KIT	
DWG NO.	RBE117-12010W62D-27
REV	B
MAT'L O-1	
HEAT	
TREAT	
FINISH BLACK OXIDE	
SPEC QMSI-6.2.2, B.O. REV D	
DRAWN BY:	DUERFELDT
CHECKED:	RF
OPPS APPR:	FK
QA APPR:	N/A
APPROVED:	SAD
SCALE	1:2
DATE	2/22/2016
USED ON MODEL	
EC145	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .005 FRACTIONS ± 1/8	
XX ± .01 ANGLES ± .5°	
X ± .1 SURFACES = 125 ✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
SHEET 15 OF 23	

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M20X2.5 - 6H THRU ALL

$\phi 1.765$

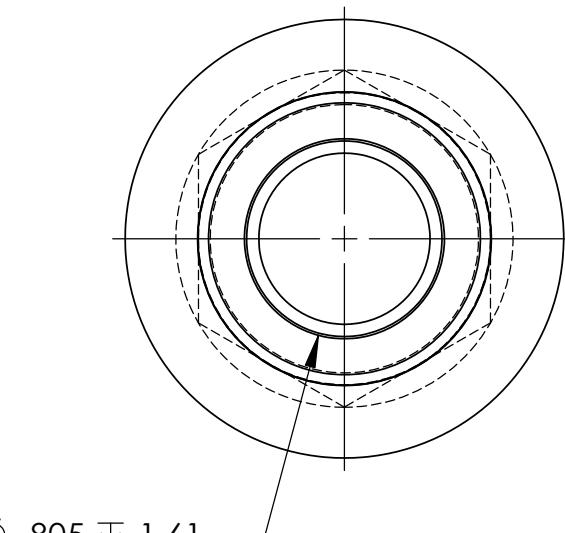
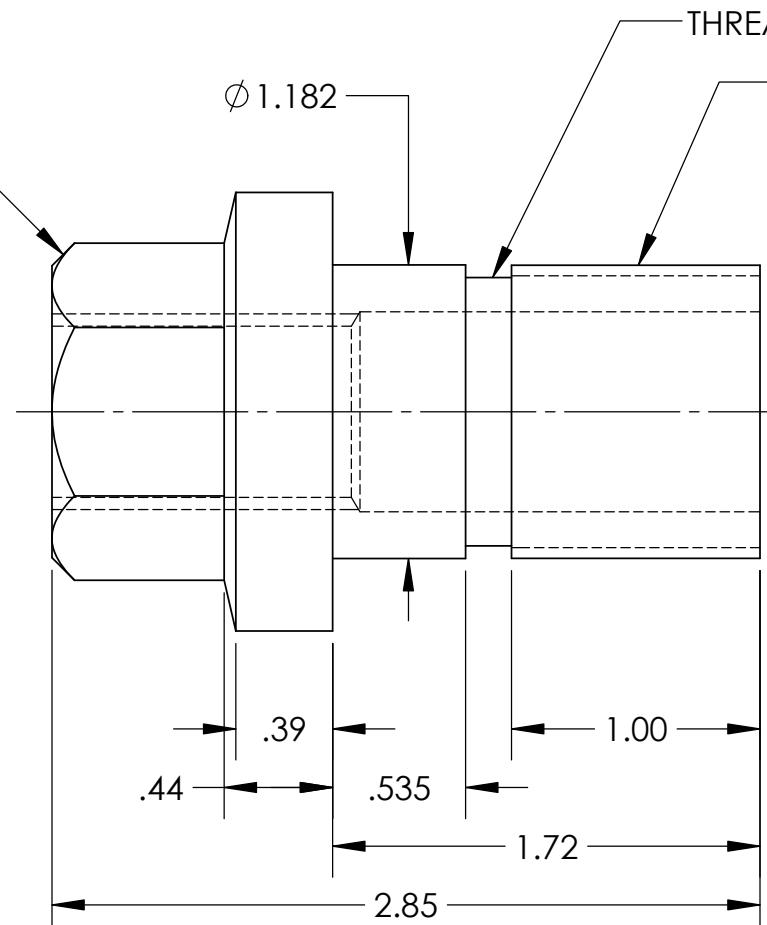


.09 X 45°

$\phi 1.182$

THREAD RELIEF

M30x2.0 Machine Threads



(-29)

NUT

**DART**  
AEROSPACE

TITLE  
**MAST REPLACEMENT KIT**

DWG NO. **RBE117-12010W62D-29**

REV  
**B**

MAT'L 4140/4142 Q & T

HEAT

TREAT

FINISH BLACK OXIDE

SPEC QMSI-6.2.2, B.O. REV D

DRAWN BY: DUERFELDT

CHECKED: RF

OPPS APPR: FK

QA APPR: N/A

APPROVED: SAD

SCALE 1:1

DATE 2/22/2016

EC145

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES

.XXX ± .005 FRACTIONS ± 1/8

.XX ± .01 ANGLES ± .5°

X ± .1 SURFACES = 125

1. BREAK ALL SHARP EDGES

.015 x 45° OR .015R

2. DIMENSIONAL LIMITS APPLY

AFTER PLATING

3. INTERPRET DIM AND TOL PER

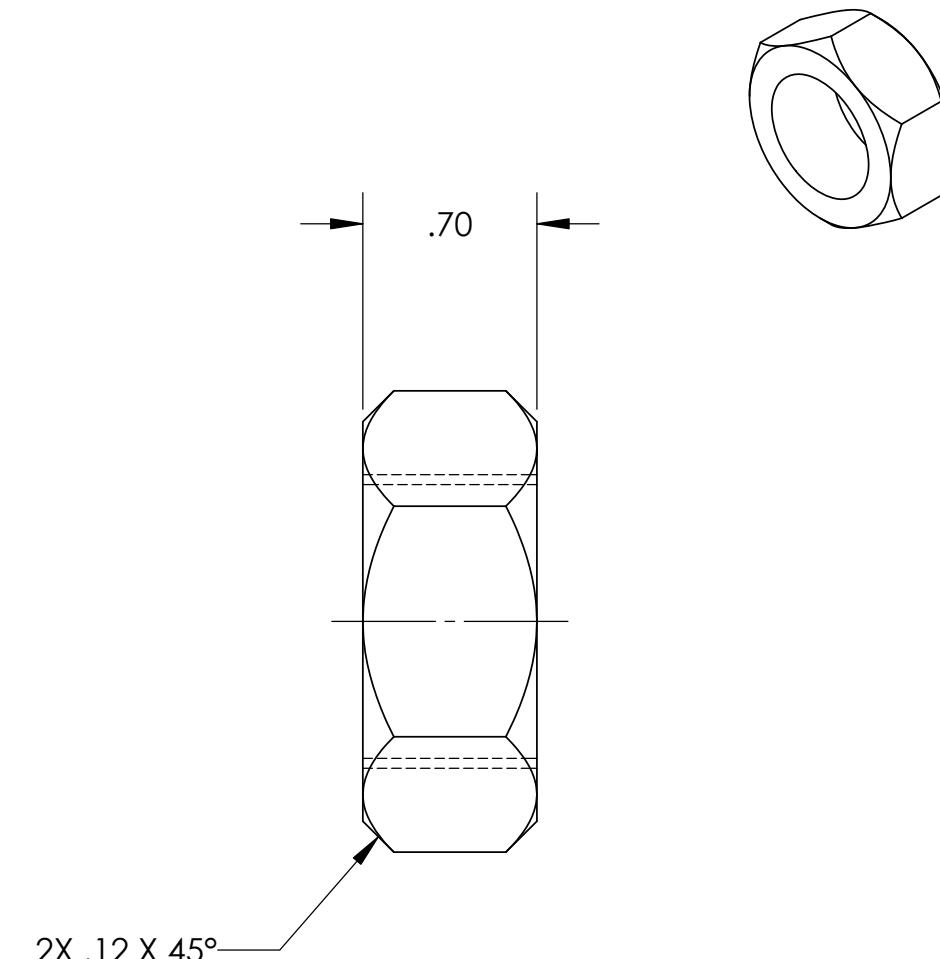
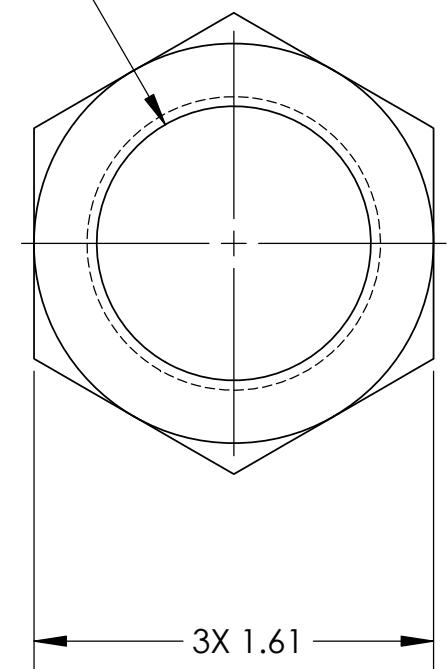
ASME Y14.5M-2009

USED ON MODEL

SHEET 16 OF 23

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M30X2.0 - 6H THRU ALL



(-31)

HEX NUT

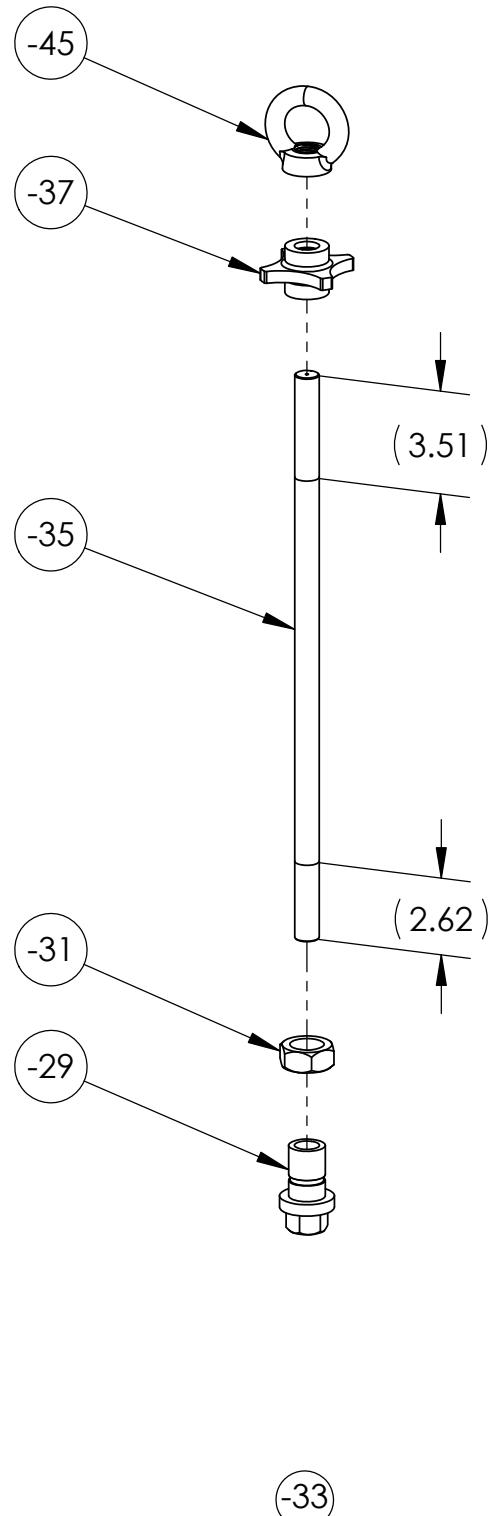
**DART**  
AEROSPACE

TITLE  
**MAST REPLACEMENT KIT**

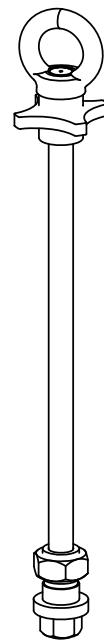
DWG NO. **RBE117-12010W62D-31** REV **B**

MAT'L 4140/4142 Q & T	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT	.XXX ± .005 FRACTIONS ± 1/8
TREAT	XX ± .01 ANGLES ± .5°
FINISH	X ± .1 SURFACES = 125
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY:	DUERFELDT
CHECKED:	RF
OPPS APPR:	FK
QA APPR:	N/A
APPROVED:	SAD
SCALE	1:1
DATE	2/22/2016
SHEET	17 OF 23

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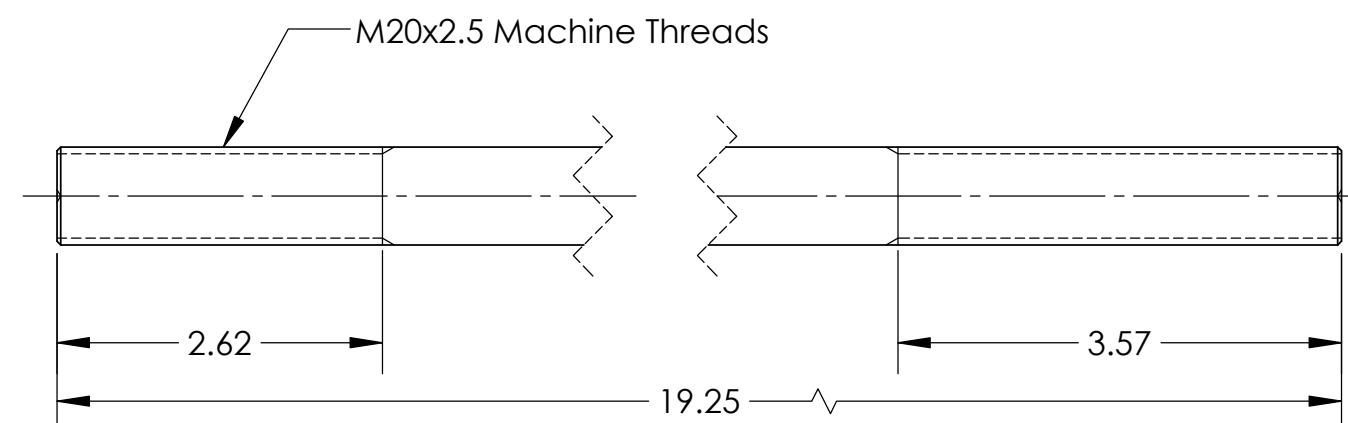


SHORT ROD ASSEMBLY



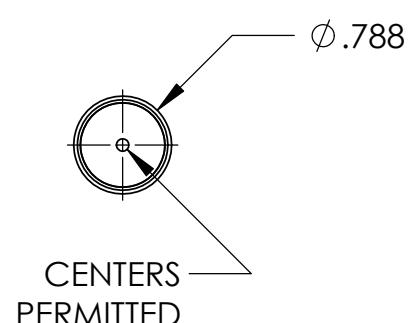
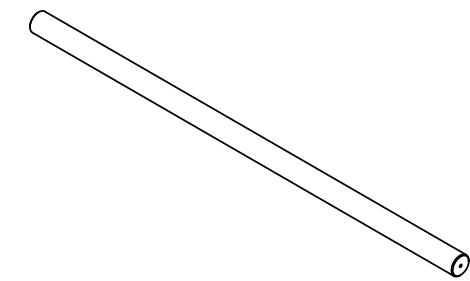
<b>DART</b> AEROSPACE		
TITLE		
MAST REPLACEMENT KIT		
DWG NO. RBE117-12010W62D-33 REV B		
MAT'L UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT FRACTIONS $\pm 1/8$ FINISH ANGLES $\pm .5^\circ$ SPEC SURFACES = 125		
DRAWN BY: DUERFELDT CHECKED: RF OPPS APPR: FK QA APPR: N/A APPROVED: SAD		
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009		
USED ON MODEL EC145		
SCALE 1:8	DATE 2/22/2016	SHEET 18 OF 23

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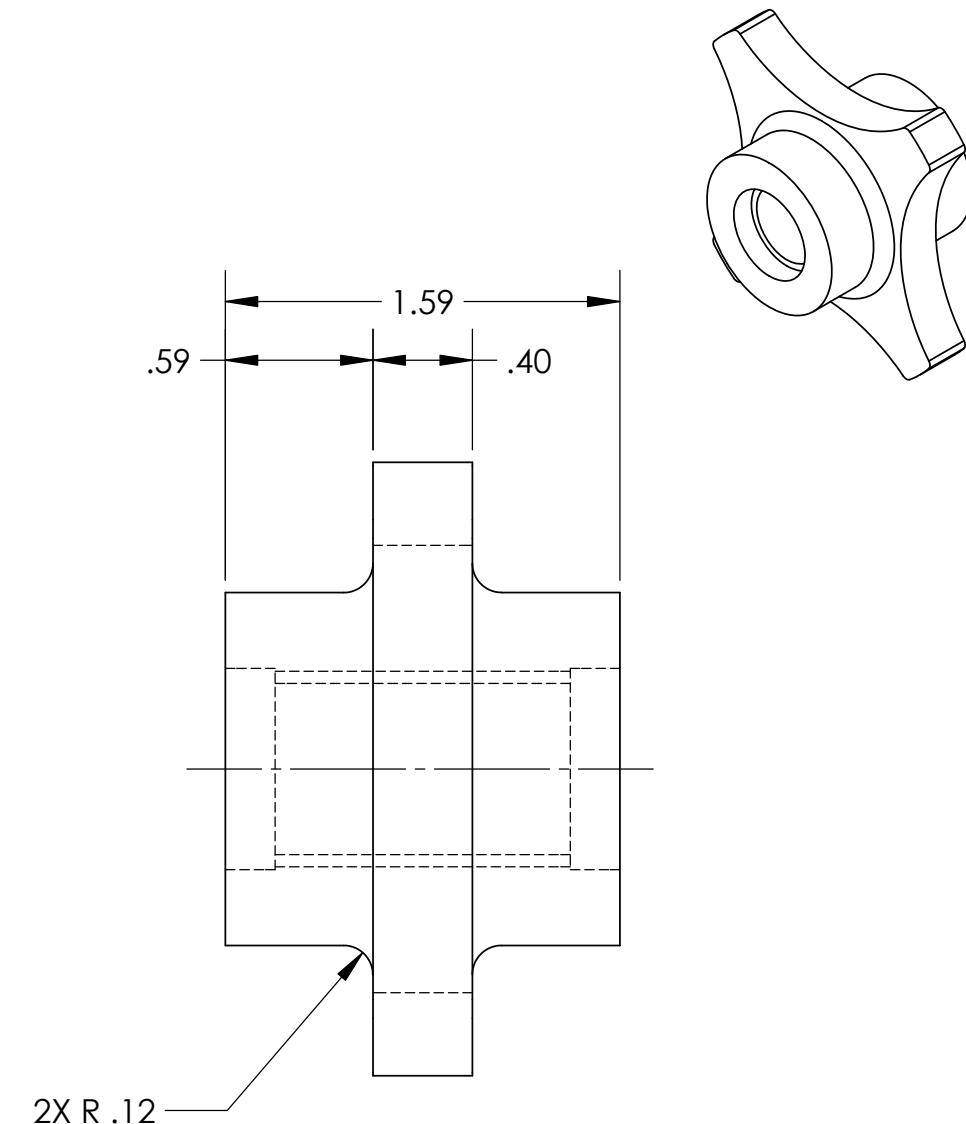
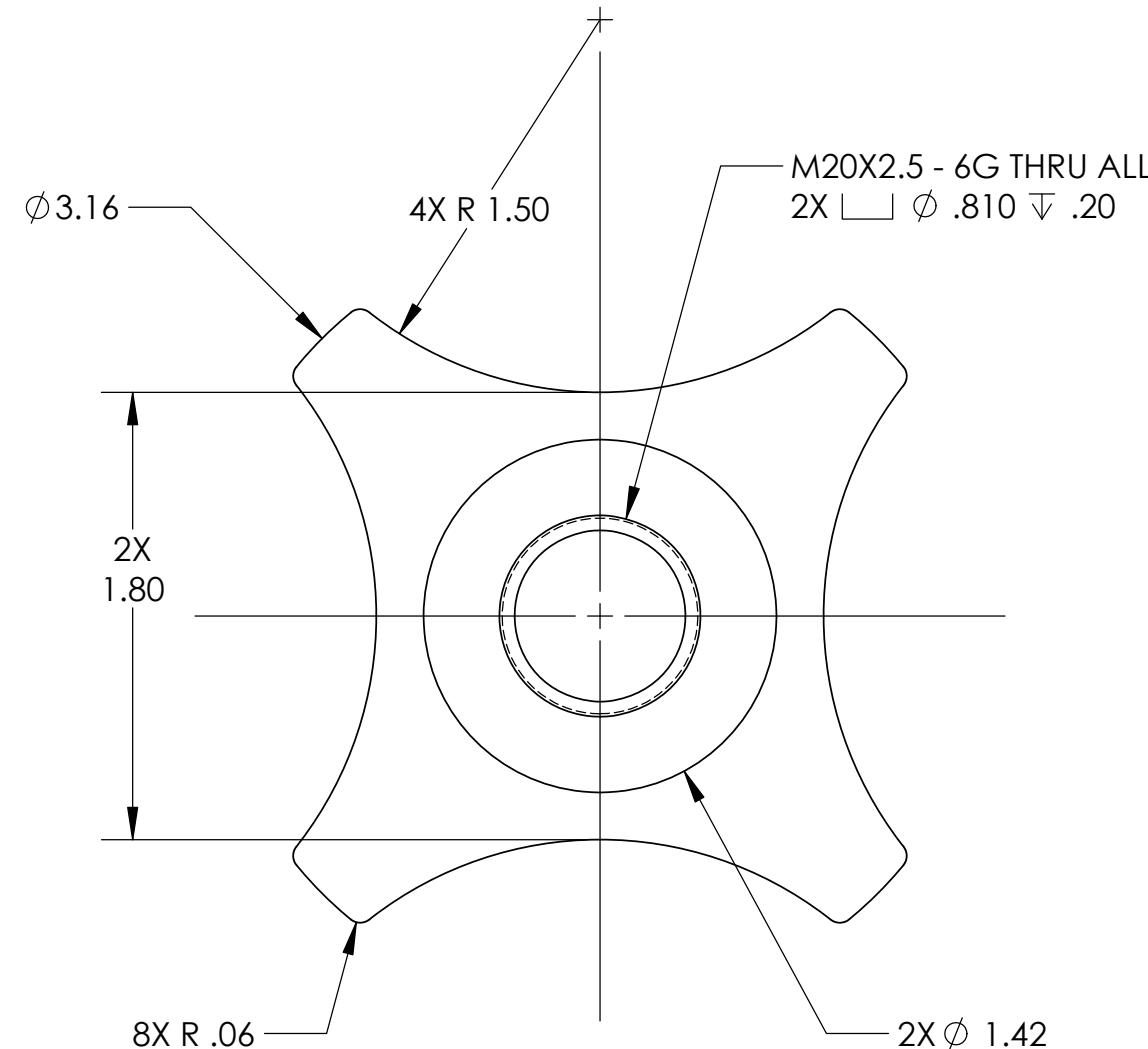
(-35)

SHORT ROD



<b>DART</b> AEROSPACE	
TITLE	
MAST REPLACEMENT KIT	
DWG NO. RBE117-12010W62D-35 REV B	
MAT'L O-1	
HEAT	
TREAT	
FINISH BLACK OXIDE	
SPEC QMSI-6.2.2, B.O. REV D	
DRAWN BY:	DUERFELDT
CHECKED:	RF
OPPS APPR:	FK
QA APPR:	N/A
APPROVED:	SAD
SCALE	1:2
DATE	2/22/2016
USED ON MODEL	
EC145	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 XX ± .01 ANGLES ± .5° X ± .1 SURFACES = 125✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	

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LOBED NUT

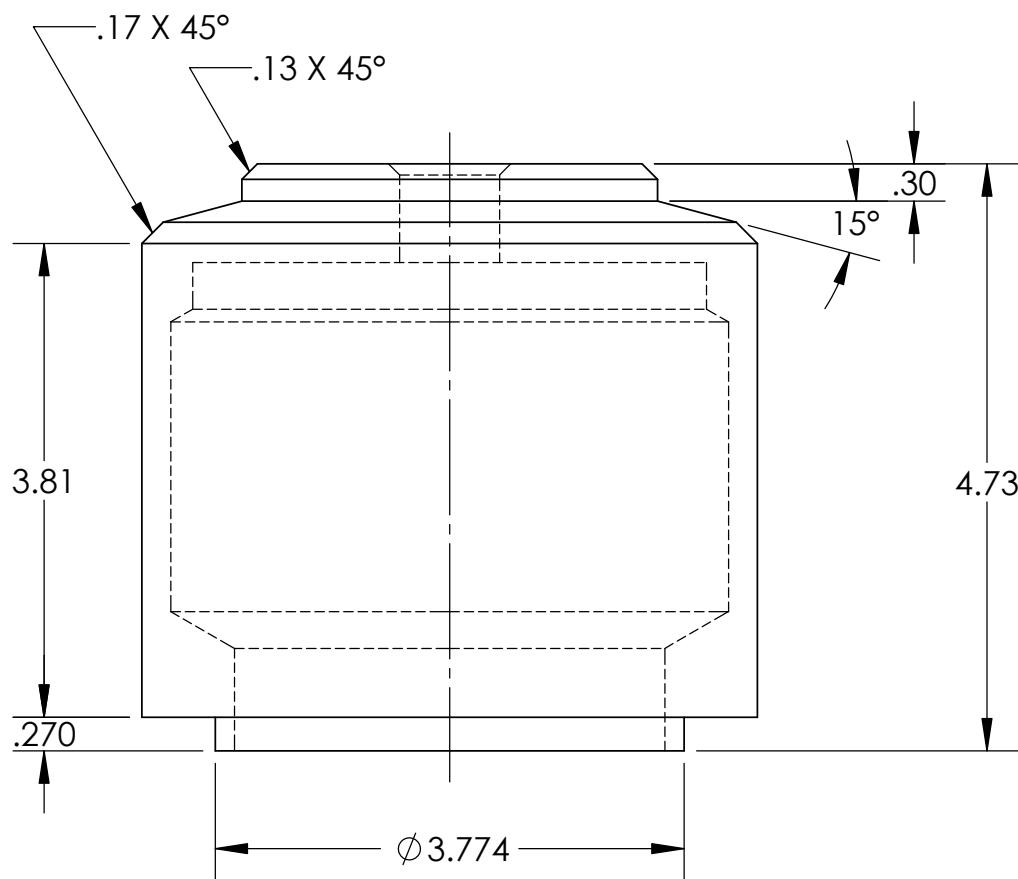
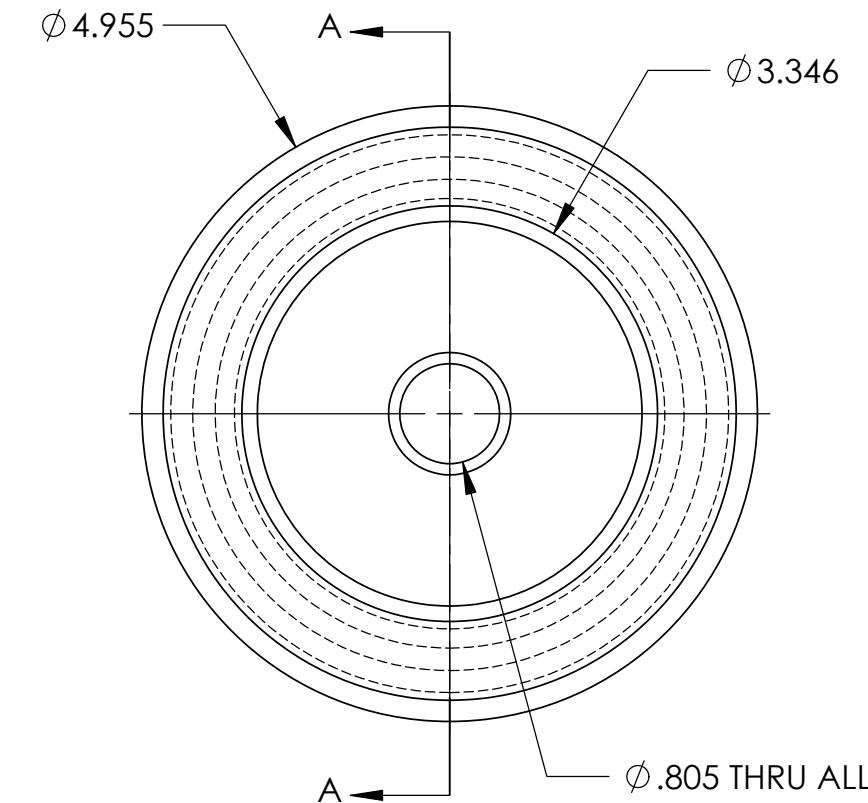
-37

**DART**  
AEROSPACE

TITLE  
**MAST REPLACEMENT KIT**

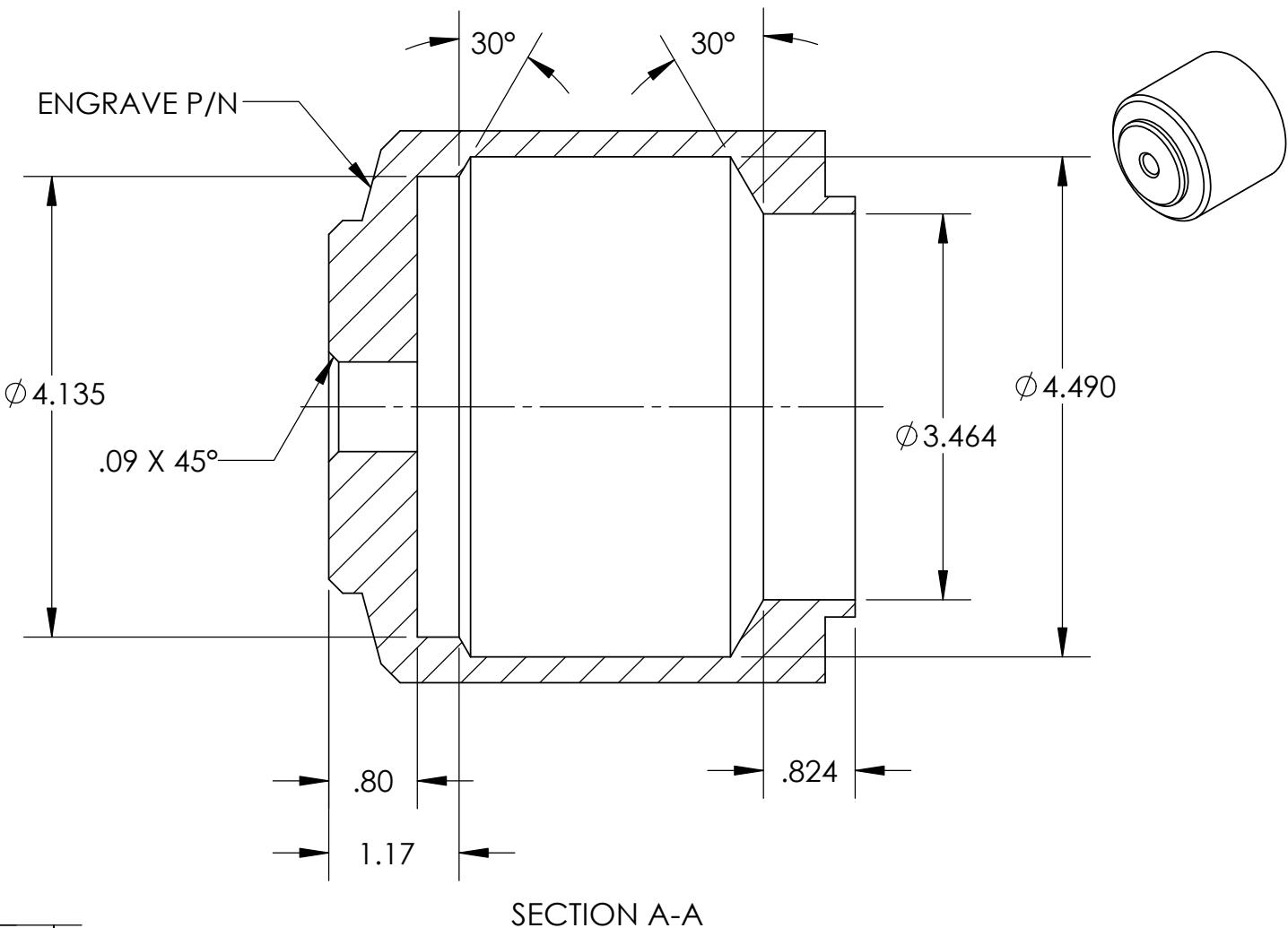
DWG NO.	RBE117-12010W62D-37	REV	B
MAT'L	4140/4142 Q & T	UNLESS OTHERWISE SPECIFIED	DIMENSIONS ARE IN INCHES
HEAT		XXX ± .005	FRACTIONS ± 1/8
TREAT		XX ± .01	ANGLES ± .5°
FINISH	BLACK OXIDE	X ± .1	SURFACES = 125
SPEC	QMSI-6.2.2, B.O. REV D	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
DRAWN BY:	DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
CHECKED:	RF	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
OPPS APPR:	FK	USED ON MODEL	
QA APPR:	N/A	EC145	
APPROVED:	SAD		
SCALE	1:1	DATE	2/22/2016
			SHEET 20 OF 23

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PULLER PISTON

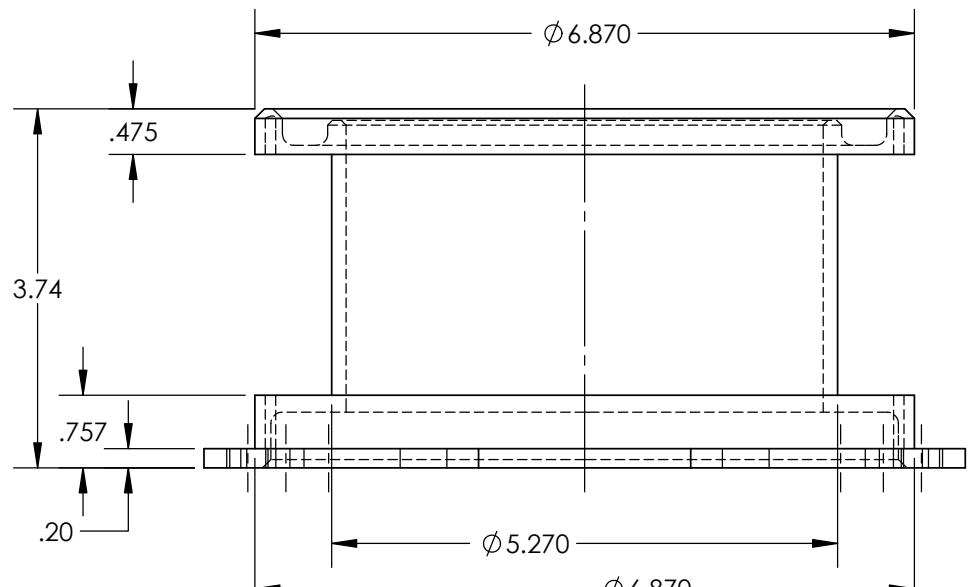
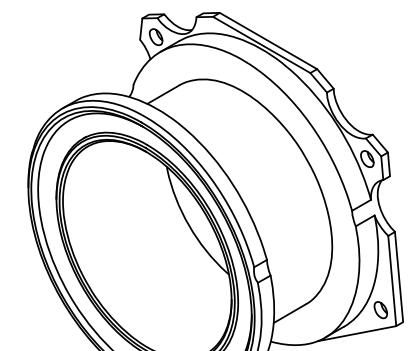
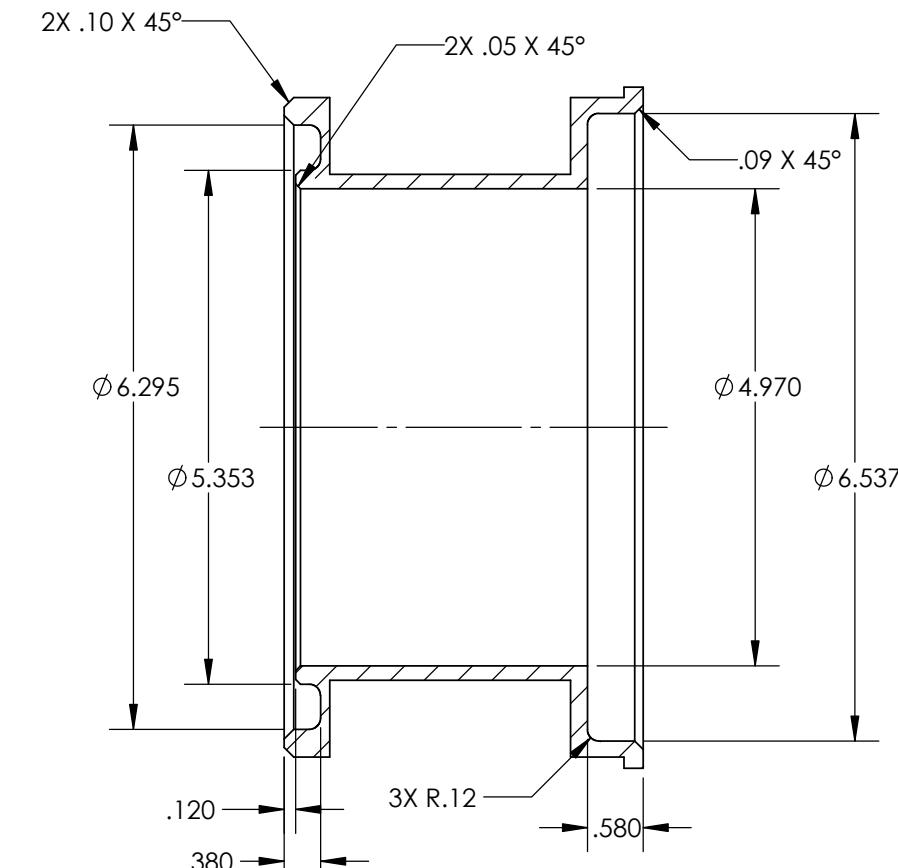
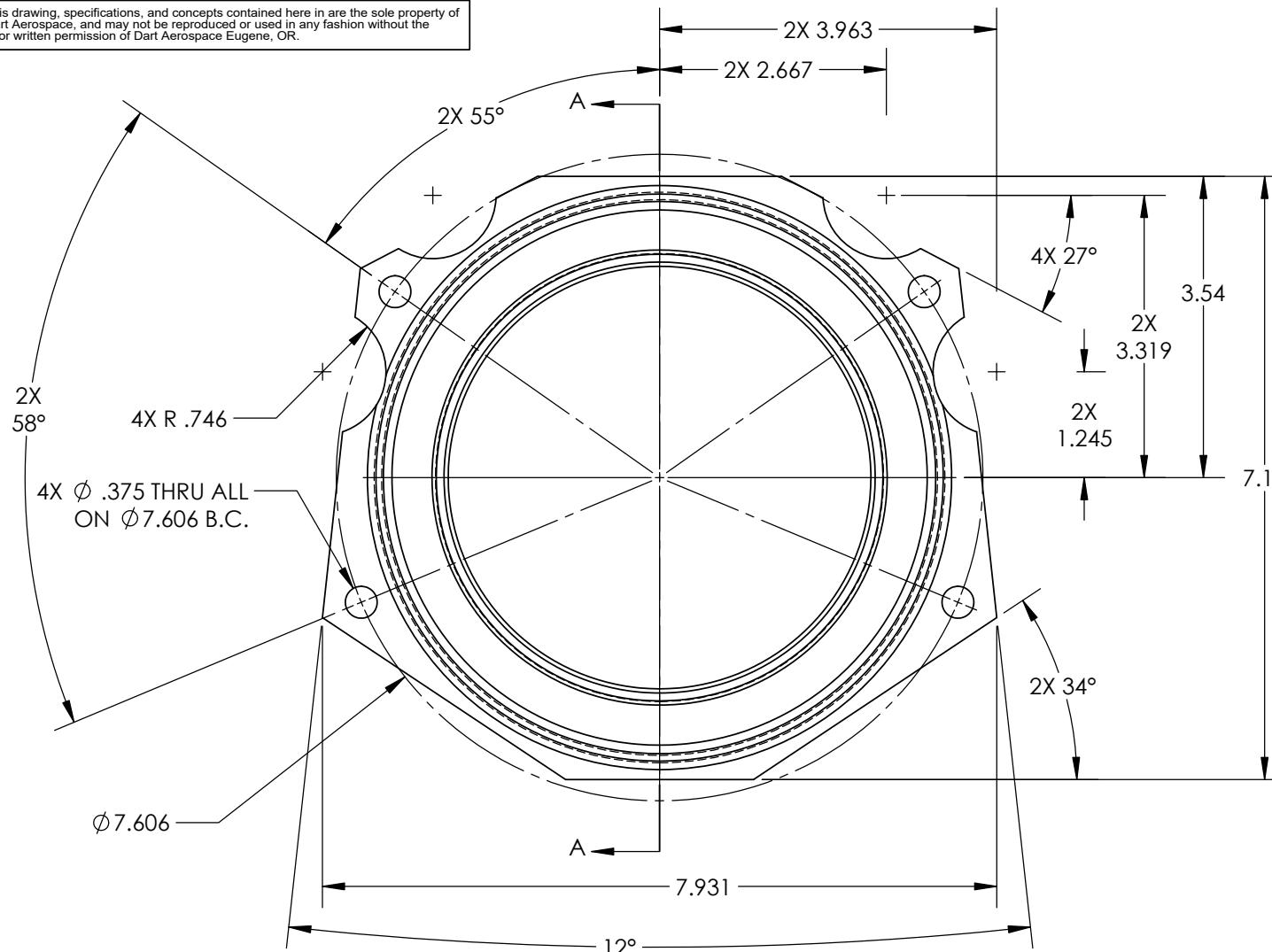
(-39)



SECTION A-A

<b>DART</b> AEROSPACE	
TITLE	
MAST REPLACEMENT KIT	
DWG NO. RBE117-12010W62D-39 REV B	
MAT'L 4140/4142	
HEAT TREAT	
FINISH BLACK OXIDE	
SPEC QMSI-6.2.2, B.O. REV D	
DRAWN BY:	DUERFELDT
CHECKED:	RF
OPPS APPR:	FK
QA APPR:	N/A
APPROVED:	SAD
SCALE	1:2
DATE	2/22/2016
USED ON MODEL	
EC145	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .005 ± .005 FRACTIONS ± 1/8 .015 ± .01 ANGLES ± .5° .1 ± .1 SURFACES = 125	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
SHEET 21 OF 23	

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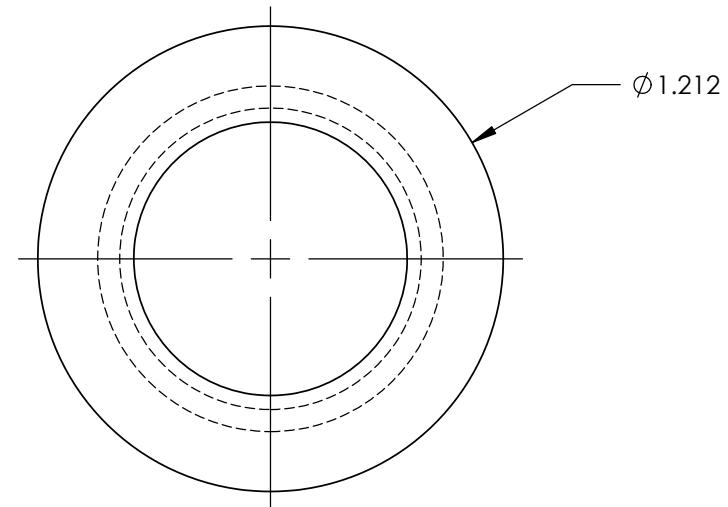
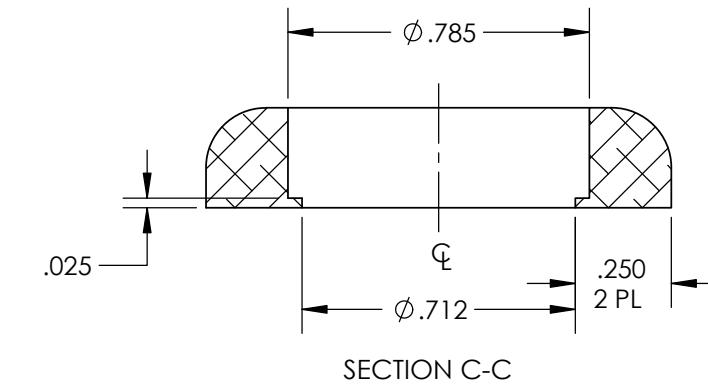
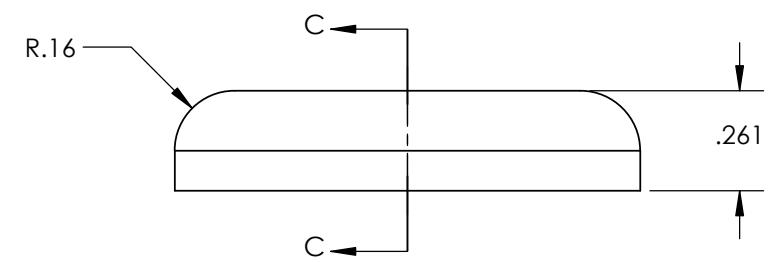


PULLER CYLINDER

(-41)

DART AEROSPACE	
TITLE	
DWG NO.	
RBE117-12010W62D-41	REV B
MAT'L: 4140/4142	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT:	XXX ± .005 FRACTIONS ± 1/16
FINISH: BLACK OXIDE	XX ± .01 ANGLES ± 5°
SPEC: QMSI-6.2.2, B.O. REV D	X ± .1 SURFACES = 125
DRAWN BY: DUERFELDT	1. BREAK ALL SHARP EDGES
CHECKED: RF	.015 x 45° OR .015R
OPPS APPR: FK	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
QA APPR: N/A	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
APPROVED: SAD	USED ON MODEL
SCALE: 1:2	DATE: 2/22/2016
DATE:	SHEET 22 OF 23

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(-62)

WASHER ▲

 <b>MAST CHANGE KIT</b>	
TITLE	
DWG NO. RBE117-12010W62D-62 REV B	
MAT'L 17-4 PH UNLESS OTHERWISE SPECIFIED HEAT TREAT 34-38 DIMENSIONS ARE IN INCHES FINISH XXX ± .005 FRACTIONS ± 1/16 X ± .01 ANGLES ± 5° X ± .1 SURFACES = 125/ SPEC TYPE 630 / S17400 SS BAR DRAWN BY: DUERFELDT 1. BREAK ALL SHARP EDGES CHECKED: RF 2. DIMENSIONAL LIMITS APPLY OPPS APPR: FK 3. INTERPRET DIM AND TOL PER QA APPR: N/A ASME Y14.5M-2009 APPROVED: SAD USED ON MODEL	
SCALE 2:1	DATE 2/22/2016
SHEET 23 OF 23	